# THE CULTIVATOR.

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## Feeding with Oil-Cake.

A subscriber (C. R.) having lately inquired for particular directions in feeding with oil-cake, its cost and advantages, our correspondent, JOHN JOHNSTON, who, as all our readers know, is a close observer, and has had extensive experience, has kindly furnished us the following answer:—

I prefer oil-cake meal to corn meal for fattening either cattle or sheep, although if I have corn of my own raising, which I always have, I feed it. But I always feed oil meal once a day, and generally the last month of feeding, I feed oil meal only, and generally leave over corn for next fall feeding, as new corn meal wont keep for many days, and when it sours it purges the cattle, and then they wont eat for some days; but they never get sick with eating oil meal, and for all I have fed, or rather fatted, a great many cattle, I have never had one die, as all I have fatted have had at least half oil meal.

I began feeding oil meal at $7 per ton, and followed it up until I paid $28 33 last year, and this season $27. These prices are too high, unless we can get nearly or quite $6 per 100 lbs., live weight, for sheep and cattle. When I kept a regular flock of store sheep, I always fed each sheep during winter and spring, 1½ bushel of oil meal. Then I was paying only $10 per ton. So late as 1846, I had never paid over that amount, and for five years afterwards from $12 to $14 per ton. It paid admirably, fed to store sheep, as 1½ bushels at $10 a ton, cost only 38 cents. That, with straw, will winter a sheep much better than any hay (first-rate clover hay excepted.)

The extravagant prices they pay in England, hurt us American farmers; else every ton of oil-cake in this country ought to be fed in it. I consider there is nothing I feed makes as rich manure, and all I want is manure. If I have plenty of that, I can have everything I want, money and all; but it requires the manure to make money now-a-days, and cattle and sheep manure is the only kind that will pay here. I have done with the manures of commerce.

I raise my calves on oil meal, and do it very cheaply. Oil meal and skimmed milk, sour milk or butter-milk, make fine calves and always healthy. The first winter I feed them oil meal enough to keep them growing; the second winter give them two quarts per day, and by April or May have sold my two-year-olds for beef at from $50 to $60 each. I have fed them generally about $11 worth of oil meal each in that way.

It also pays well to fat lambs in winter. I have made Merino lambs bring me $5 each before they were a year old, by feeding them 70 cents worth of oil meal during winter. It don't take the half to fat lambs it does old sheep. I have fed oil meal many years, and as long as I do feed, I will continue to do so. I think we will get it much lower another year, as I notice flax seed has fallen very much. If beef and mutton get low, it wont do to pay a high price for oil meal. Last spring New-York oil-cake brought £15 sterling per ton in England. Now it is from £10 to £10, 15s., and falling; I notice it is much lower in New-York.

There is 40 bushels of 50 lbs. each in a nett ton of oil meal, but 50 lbs. of oil meal is much better to me than 60 lbs. corn meal; yet they do well mixed. When I feed corn to sheep, I give that one part of the day and oil meal the other. When I have fed all corn to sheep, I have often lost some by a rush of blood to the head; their necks and heads would be gorged with blood, when all behind the neck would be very white, more so than any slaughtered sheep—but I never lose any in that way when I feed oil meal.

I sold cattle last year 22 months old, weighing 1,125 lbs. gross, and I have some this year that I think will go about the same when they are the same age. There is only a little Durham blood in them.

It should be urged on the farmers to buy and feed oil-cake in preference to buying the manures of commerce. It will be a great deal more to their profit. If I was as able to go around the country as I was ten years ago, I would fat far more stock in winter than ever I did. There can be no profitable farming without good rich manure, but my farming days are nearly over; but if young men would only do as I have done, they would reap the benefit of it by and by.

## Cleaning Land of Weeds.

TO THE EDITORS OF THE COUNTRY GENTLEMAN—Having had some experience in the destruction of weeds on neglected land, I offer a few remarks for those who may feel interested on that important subject.

Generally speaking, when land is let or bought at a low price, it acts as an inducement to the intending farmer to take more land than his means will admit of to manage and cultivate well—the land gets poor, and produces weeds that are, in their nature, peculiarly suitable to that description of soils; and consequently in many instances, not to got rid of by the ordinary system of cultivation. When such is the case, the farmer finds the land unproductive—in fact impoverished, and either sells or lets. Were he to carefully estimate the loss to himself and the public generally by neglecting this, one of the first and best principles of modern farming, possibly it might induce him to pay to that department the attention which it deserves. If the injury were confined to those who did not bestow or care to employ the labor for the extermination of weeds, it would be of little importance; but unfortunately it is not; the weed seeds of a neglected field are carried far and wide by the wind, over many others, causing, by their much more rapid growth, a great deterioration to the crops and land on which they may alight.

There is an error into which many cultivators fall, that aggravates the evil; it is the collecting and *saving* all weeds, after digging potatoes or other root crops, and carting them to a heap in a corner of the field to perish. Such practice would hold good, if they were annual weeds, previous to blooming; but when such collections are composed of perennial rooted weeds and others full of seeds, it is doubtless better economy to burn them, than run the risk of a fresh crop for the next season. It is a fact that perennial rooted weeds will retain their vitality for years in a heap. How often have I seen large mounds of them, after raising some starved root crop, containing among others, Couch grass, (Triticum repens,) Bindweed, (Convolvulus sepium and arvensis,) Thistle, (Serratula arvensis,) Coltsfoot, (Tussilago farfara,) Horsetail, (Equisetum sylvaticum and arvense,)—plants useful in their way, but which ought not to be seen on any farm. Large quantities of them are used fresh as bedding for cattle, and then turned out and mixed with the dung-heaps. It is next to impossible to obtain a rent-paying crop, and in addition a profit to the farmer, while he suffers these weeds to grow year after year, with only an occasional check by the sparing use of the hoe. Such means will never clean the land, but will, to a certainty, ruin the farmer; indeed it may be accepted as a rule, that foul land is an infallible sign of a lack of skill and energy on the part of the owner.

Now the plan of destroying weeds is very simple, if done as I direct, and which I have carried out with complete success on land that had been offered to several, rent free, for a term of three years—the land around of that nature, letting at £6 ($30) the acre—on condition of clearing it of the Tussilago farfara, which grew so rapid and in such abundance as to defy the labor of many years to eradicate. The labor in fact produced an unfavorable result; the weed produced and reproduced to that extent as to smother by its broad leaves any crop that might be sown. No person would accept the offer, so I took it; and well was I laughed at, for at best it was considered a fool's bargain.

I began operations early in April, 1856—that is I plowed shallow, and then sowed *two tons of salt per acre*—a heavy dose some will say; but I had tried it frequently before; consequently it was no venture. I then harrowed it in and left it. In a week or two I plowed again, and again whenever the foliage covered the ground, which it did in a few days. Altogether I gave the land four plowings, and then manured it for cabbages. These I planted in July; they were fully grown, and all carted to market and sold in ten weeks after planting. Of course I used the horse-hoe as frequently as possible, to assist the crop and to destroy any weed that *might* come, but none appeared. Now my neighbors, who were so merry, wondered at its non-appearance; their faces became elongated with surprise. Yet many predicted a fine show of bloom in March or April, 1857, for, said they, wait till then, and you will see that he has only killed the surface roots.

Be it remembered this field has had a notorious character for more than fifty years, and was brought into its foul state only by saving the weeds of a field some distance off—mixing them with the stable dung, and then carting the precious compost to the land I now speak of.

The last week of February, 1857, I planted the whole field with early potatoes, and they soon showed the drills to my satisfaction. I then applied 20 bushels of lime per acre, to neutralize the salt, and then put in the horse-hoe, not so much to destroy the remains of the coltsfoot, for there was none, but merely to open the soil, as I found it became encrusted after every shower of rain. Then could be seen the briny efflorescence on the surface, looking very like a white frost. The potatoes I raised in July. The crop was good in quantity, but as must be expected poor in quality. The field is now down in cabbages again.

For my first crop of cabbages I realized £20 ($100) per acre. The potatoes will, if sold at the present market price, fetch £30 per acre, but as they are for seed they will bring more. My present crop of cabbages are fully equal to last year, and may fetch more, being later and the prices higher—say £25 per acre. Now my labor, manure, seed and plants, stand me in for the three crops per acre, £30, leaving a comfortable profit of £45, the land being of course rent free.

As soon as my cabbages are out I intend to sow it with early peas in three feet drills, so that I may use the horse-hoe to advantage. Be it understood, *no weed of any description* has shown itself since July, 1856. I have dug down in various places to the depth of two eet, and cannot find a particle.

In fact a good dressing of salt to begin with, plenty of stable dung, a judicious cropping, and a frequent use of the horse-hoe, will clean the land of the foulest weeds; care must be taken to use only root or green crops for a few years—never, under any circumstances sow it down to grass until the land is perfectly clean.

After a heavy application of salt, it is necessary to wait three months at least, to allow it to be dissolved, and in some measure to be carried off by the spring rain. It is also requisite to plant the land with any of the following crops, which would be serviceable to the farmer, and can be transplanted with the certainty that they will increase more considerably in bulk than if left in the seed bed: cabbages of sorts, Swedish turnips, kohl rabi and mangold wurzel, all these being in

their native wild state, marine plants, consequently common salt is a necessary and beneficial addition to the soil, in the cultivation of all plants as naturally grow near the sea shore. It is necessary to add that it would be a waste of money and labor to *sow seeds* of any crop the first year on salted land, but no fear need be entertained of failure as regards root crops.

No perennial rooted plant of any description can preserve its vitality for two or three years, if subjected to a continual decapitation, never mind how favorable the soil. The root exists and sends out young rootlets, which in time become strong like the parent, only by means of its foliage imbibing the various gases of the atmosphere. This supply continually cut off, the root dies.

One of the great obstacles to clean farming is, the the short period a rotation is made to extend over Lengthen that period by cultivating root crops, and cultivate them well, and the consequence will be that when sown in clover and grass, you will have clean pastures. Do not let it remain down more than three years. Break it up again as soon as the clover dies off. After that grass is unprofitable. J. LEVESQUE, *Market gardener, Island of Jersey.*

**The Paulownia Imperialis.**

This really splendid flowering tree was first cultivated in the hot-house. Mr. Neumann received one seed from a from a foreign country: he sowed it, and with ease raised it to a tree. Having but one, he was fearful of losing it, so kept it in a hot-house. Finding this situation was not congenial to its habits, he planted it out in the open air. Here it soon gave evidence of its being in its proper place. The leaves grew ten times the size they did while cooped up. It was not long before it showed buds and flowered; the horticultural world was in raptures, and botanists gave it the name at the head of this article. It was soon sought after by all lovers of ornamental trees, and found its way to this continent, where south of New-York it succeeds admirably, but unfortunately, north of this, our winters are too severe. It will grow for a few years, producing enormous leaves, especially if the winters happen to be moderate, but only to be hopelessly cut down with such winters as '56 and '57. It has flowered however, in Albany.

The tree has a resemblance to the well known Catalpa. It is a native of China and Japan, forming there a tree forty feet high. E. S.

**How to Make Home-Brewed Beer.**

EDITORS OF THE CO. GENTLEMAN—I now comply with the request of the New-Brunswick Farmer and others, to let them into the secret (if secret it is,) of brewing good table beer; but it would have been more congenial if the Farmer and others, had given information where good malt could be obtained at a reasonable price, without having to apply to the brewers. And here I beg to ask one question, and then proceed to brewing—Is there any maltsters in the United States, who make malting their exclusive business?*

We will now commence to brew ten bushels of malt. We want a kettle or boiler, that will hold a hogshead, 63 gallons—clean it thoroughly—fill up with clean water, (soft water is preferable,) the night before you intend to brew. Next morning start your fire under the kettle, say at 3 o'clock—have a good tight molasses hogshead standing near the kettle, on trestles; bore a hole in one of the staves, close to the bottom, to admit of a good sized tap; drive the tap fast. Over the tap, inside the hogshead, put a large handfull of clean wheat straw; confine it down over the tap with two or three stones, but not so as to prevent the wort running out. Then put in your malt, (of course one end of the hogshead is taken out;) as soon as your water boils, throw in a pailful or two of cold water—just as you would were you about scalding a pig. Then fill up your hogshead with scalding water, and well stir up the malt.

Be sure not to remove the straw from over the tap; if you do you will find your cake to be all dough. When well stirred up, cover over the top to keep the steam in. Let it remain one and a half hour. Stir up well again; let remain one and a half hour longer, and then draw off into a tub.

When the wort is all drawn off, fill up the hogshead again full with boiling water; stir up well; let it remain one hour; draw off and fill up again with boiling water. Then return your first and second drawing into the kettle; put in one pound of good hops for every bushel of malt, say ten pounds; if the hops are not good, add two and a half pounds more. Then let the whole boil for three hours, but look out when it first begins to boil, or all the fat will be in the fire. As it begins to rise, stir well. As soon as the hops break and roll over, the danger is over.

At the end of three hours, put a strainer over a tub, turn over your wort out of the kettle, and return the hops back. Then fill up with the wort last drawn off, and what may be left of the two first drawings, boil one hour, strain off, and set all to cool.

When the wort is about milk warm, take all into the cellar, and turn into two tubs or more. Then add about three pints of brewer's barm (yeast) and cover the tubs over with a cloth, and let it remain until morning. You will see a beautiful head on the top. Stir all up and turn it into your barrels, letting the

bung hole be uppermost. In a little while it will begin to work (or ferment.) Once a day fill up your barrels with wort, and for this always have a few pails of wort more than will fill your barrels the first time In three or four days it will have done fermenting. Then put into each barrel a handful or two of the spent hops, put in the bung tight, so that the least air cannot escape. In two weeks it will be fit to tap.

Ten bushels of good malt will make four barrels of good beer, and one barrel of small beer to tap first.

Some cellars will keep beer better than others. If you find the beer not to keep well, add a little more hops. If you want a strong barrel of ale, take the first drawing of wort; boil as before stated, and let it ferment off well in the barrel, and do not tap for six months. You will have a glass of ale as fine as wine, and as strong as is desirable. I need not say that all the vessels must be scrupulously clean. JOHN BARBARLEYCORN.

## Farm Buildings.

The comparative merits of barns, as regards economy and space, is an important subject for farmers. The old-fashioned buildings are rapidly giving place to the new, and comfort and cleanliness are superceding misery and filth. Once it was thought that a barn with large cracks was better for storing green fodder. Now men think that a tight barn is best for the same purpose.

Once, barn cellars for housing manures were scouted. Now such a cavity is considered of the utmost importance. Once, liquid manure was considered less valuable than solid. Now, the reverse is the case. I have recently visited some of the best barns in this vicinity, and find them as different from the big timbered, high beamed, cold barns of 30 years ago, as chalk is from cheese. One barn in particular I recall. It has yellow paint, and a slate roof. The ground on which it stands is nearly level, but its whole basement is for stabling and manure, and is built of brick. The cattle are tied by stanchions; they stand upon a five foot platform. Behind them is a gutter two feet wide and three inches deep. Back of that is a walk of the same width as the gutter. Still farther back, doors open in a brick wall, where is a room the same length of the stables, but wider and deeper, for the throwing of manure. Large quantities of loam or earth are kept dry and from freezing in the corners of this room, and are wheeled daily into the stables for litter.

Where straw is worth $9 per ton, earth is much cheaper as an absorbent. By this process the cattle are kept clean, and the stables are always sweet and comfortable. The mercury did not descend to freezing point in this stable last winter. The hay and grain are stored above the cattle, and descend through scuttles into a passage-way in front of the stock. Roots of all kinds are abundantly stored in the root cellar. These are cut and fed twice a day to the stock, to the amount of half a bushel at a time to each animal It does not require a large barn to store such fodder for 20 head of cattle for a winter; besides the cattle come out in excellent condition in the spring. The water that the cattle drink is nearly of the same temperature as the stables. Indeed very cold water is an injury to any man or beast. Milkmen understand this point, and govern themselves accordingly. Economy of space, neatness and warmth are characteristics of the building described. J. N. BAGG.

## Watson's No-Patent Self-Sustaining Portable Farm Fence.

Our friend, JOSEPH WATSON, Esq., of Clyde, has planned a very simple and inexpensive Fence to be constructed as follows: Each length requires six rails 12 or 13 ft. long, sawed 1 or 1¼ inches, as the strength of the timber may require, which with spaces between them respectively of 4, 5, 6, 7 and 8 inches, and the necessary blocking underneath, will make a fence four and a half feet high. Two battens and two braces are provided for each length, of the same stuff and size as the rails, 4 ft. 3 in. long—a 13 foot rail will make three with no loss of stuff. These are nailed as shown in the

annexed diagram—one good clinch nail at each crossing being sufficient. The battens are placed as will be noted, one on the outside and one on the inside of the fence, and when the batten at the right end of one length is on the outside, that on the right end of the next length should be on the inside, this alternation being necessary to *bind* the fence more securely. The battens project, one above and the other below the last rail three inches.

When the fence is placed in position, the ends of the panels are secured to each other by a fastening of No. 9 annealed wire connecting the two battens that come together, and by its length determining the angle of the two panels of fence with each other, and its consequent *worm*. A hook in each end of the wire unites them, and when the fence is to be removed, can be easily unhooked by giving the panels a more acute angle. The small surface presented to the wind by this fence, being only 18 perpendicular inches, and five wide spaces, renders it little liable to be blown away, and as only about 30 feet of inch boards, and 48 nails are required to the rod, the cost of the whole, including the labor of putting together by any mechanical farmer at reasonable prices, cannot exceed *Fifty Csent a Rod!*

## The White Daisy.

MESSRS. EDITORS—Can you inform me as to the most effectual way to kill out the White Daisy? If you can, you will do me a great favor. Five years ago I bought a farm, and part of it is over-run with daisy. I have plowed the sod both fall and spring, and planted to corn; the next spring sowed to oats; in September plowed and sown to rye. The next summer when it came in grass the daisy was as thick as ever. It appears that every little root makes a new plant. C W.

Will some of our readers who have had successful experience with extirpating this weed, please give us their mode?

No plant can grow without leaves exposed to the air—hence plowing under often enough (and not too often, so as to turn up too soon,) will smother any plant if the work is well done. The earth may, however, be full of seed, and need a long time to start and destroy every one. We have never known any farmer to be much troubled with the daisy, who pursued a regular, long continued rotation of crops, accompanied with thorough and cleanly cultivation. There may, however, be exceptions.

## Unprofitable Farming.

In a recent paper we spoke of some of the causes of unprofitable farming,—unprofitable, not from lack of knowledge of the right way, but from neglect of well-known axioms in agriculture,—and promised to give a few more instances illustrating the subject.

*Manure* is a necessary application, in order to bring an impoverished soil into a productive state. Nothing is more certain, all agree. And yet, how much of the unprofitable farming of the country results from the attempt to grow crops on worn-out soils *without manure*. Plant corn on such land—the crop is a meagre one, both from want of strength in the soil to grow it, and length of the season to mature it A rich or well-manured soil will ripen this crop weeks earlier than a poor one. An acre of land, rich, deeply tilled, planted in good season, and thoroughly and cleanly cultivated, will produce more corn than five acres poor, shallow-plowed, late planted and half cultivated, and at perhaps one-half the expense of the latter.

*Stagnant water*, either in or upon the soil, is another cause of unprofitable farming. A soil which has no escape or outlet for the water which falls upon it save evaporation, cannot be made to produce a paying crop. In a dry season it is baked and hard—in a wet one it is often flooded with stagnant water, and is never in a condition very favorable to the growth of cultivated crops, however well suited it may be to the production of wild grass, flag and rushes. And partially drained land of this character is little better. Flooded in spring, the water passes off but slowly; nothing can be done upon it until the "subsiding of the waters," which, as they must in great part go cloudward, is a tedious process.

*Poor manure*—made so by exposure and leaching while yet in the yard—is another source of loss to the farmer. The contents of the barn-yard are generally dignified with the name of manure, even if they consist of little more than a leached mass of straw and excrement, the real strength of which has long ago passed off into some stream, or floated down the road-side ditch, and into some provident neighbor's field—it is still "manure," and is carted to the field and offered to the crop with the expectation that it will find therein nutriment, and the material for large productiveness. One thought will show how futile this expectation. How does manure benefit a plant? By its *soluble* constituents—they receive only *liquid* food. This leached manure has lost the greater share of the soluble elements of fertility, and acts in great part only mechanically upon the soil.

*Attempting too much* is another great cause of loss to the farmer. "Much labor on little land," is the secret of success—enough labor, at least, to do everything in *the best manner*. Look at it,—is it good policy to *expend* the labor of putting in a crop over six acres, when, *at the same cost*, a like result may be realized from three or four? Will you be content with thirty bushels of corn per acre, at an expense of, say $12, when by adding $3 in manure and better culture, you may realize sixty or one hundred bushels? Will you grow inferior stock with the same amount of food, when by a larger outlay at first, you may have the best—those always saleable at good prices—while the unimproved scarcely find purchasers at any price? Is it not best, either to concentrate your labor on less land, or increase your expenditure so as to embrace the whole farm in a thorough system of cultivation?

The acknowledged causes of unprofitable farming are not exhausted, and it is a proper subject for the examination of the farmer. Let him look into the matter, and see *where* and *why* he has failed.

## Cutting and Feeding Cut Fodder.

Country Gentleman—In vol. 11, no. 2, Norman Bottum makes inquiry as to a profitable machine for cutting cornstalks, and perhaps our experience may not be uninteresting to a class of your readers. That there is not only propriety in cutting up cornstalks, coarse clover hay, coarse straw, and the like, for fodder, but also economy in it, and necessity for it, no one who has ever fed stalks in the bundle, and whole coarse straw, and witnessed the extravagant waste of cattle, and their unwillingness to consume these articles in that state, and their consequent want of thrift upon them, will question. To say nothing of the waste in littering a barn-yard with whole cornstalks, the perplexity of having them in the manure to handle in their undecayed state is enough to make one look anxiously for some machine to relieve himself from the "nuisance."

The avidity with which cattle entirely consume these kinds of fodder when properly cut, even without grain, is enough to satisfy us as to its utility. Much care, however, are required in feeding when cut stalks and straw are fed. He who has not been accustomed to feeding cut fodder will almost invariably feed *a double dose*, until he learns from experience that he is overfeeding. "Little and often" we find to be the better plan, and feed only what each animal will consume entirely. Should any of the hard coarse joints of the stalks remain in the manger, they should be well mixed with the fresh stalks at the next feeding, and with some animals this course will always have to be pursued.

Our practice is to arrange cattle, either in stalls or stanchions, with separate bunks, and to give each animal a rounded half bushel of stalks, without grain, four times per day, viz.: 1st, at a very early hour in the morning—2d, three or four hours after, or just before turning out—3d, on putting up for the night—4th, three or four hours after, or just before bed-time. In the middle of the day we feed in bunks, in the yard, fine barley or oat straw whole, which is eaten with avidity.

Our stock is made up of grade Short-Horns, grade Devons, and pure Short-Horns, we having, about a year since, discarded the *very last* of a large stock of native cattle, as costing *too much* for anything but a very wealthy farmer, who has money to throw away, to keep. He who has native cattle to feed, will allow 50 per cent. in quantity more than we have given above, as a proper mess for Short-Horns or Devons.

Variety of food, for instance, cut stalks, cut straw, good hay, whole fine straw, roots, and occasionally grain, will be found far better and cheaper fodder for animals than all coarse stuff, as they relish the change of food as much as the human being appreciates it.

That there is economy in cutting good fine hay, except for a change of food, or upon which to feed grain, remains a question with us, which we design to determine by experiment at some convenient opportunity.

Our experience in cutting fodder has been varied. We have used, seen, and heard of many horse and hand power machines for cutting fodder, but most of them, we regret to say, incline one, after having tested them for cutting fodder, to "resort to the old practice of feeding stalks whole." Last summer we visited the well-managed farm of Hon. LOUIS P. LEGG, President of the Tioga County. Ag. Society, and there saw a machine which fully meets the wants of every farmer working from one acre to five hundred acres. It is a combined hand and horse power machine, manufactured by J. E. DUTTON & Co., Fulton, Oswego Co., N. Y., Cuming's Patent, price $25, and will cut cornstalks, bound straw or loose straw, equally well, from half an inch to two inches long, as may be desired. There are four knives set on a cylindrical wheel, cutting spirally, and when all on, cut half an inch long, making corn stalks or straw, to be fed with grain, a very good length, while for cutting straw to feed with stalks without grain, we usually remove two knives opposite each other, which cuts one inch long, and, if desired, the third knife may be removed, leaving it to cut two inches long. The machine is a self-feeder, and hence will draw one straw as well as a mouth full.

We have a two-horse (Emery) power, and with the lowest possible elevation of the band wheel from the floor, one of our 1200 lbs. horses will cut two bushels of straw, threshed by machine, per minute. A little more elevation, or another horse is required to cut stalks or bound straw well, and of course it will cut them much faster than loose straw.

We regard it as an almost *perfect* piece of machinery. DUNHAM & WOOD. *Etna, Tompkins Co., N. Y.*

## Oats on Turnip Ground.

MESSRS. EDITORS—You published in your paper for March 26th, my experiments with raising turnips by the application of guano. It may interest some of your readers to see an account of the oat crop on the ground where the flat turnips grew. In pulling the turnips, three rows on each side were thrown together in winrows and then topped. Part of these tops were carried off and fed to sheep, but the greater portion remained on the ground through the winter. In April sowed to oats—plowed in with one horse plow. Very soon dark green strips were observed through the whole piece. For some time I could not account for the difference, but by examining the strips closely, I found they were just on the rows on which the tops were left; and they have continued to grow ahead until the present time. I should judge double the quantity of oats are on the strips manured with tops. The whole turnip ground is far superior to corn ground joining it, of the same quality, treated alike, except the very small quantity of manure in the potato hills, and the 200 lbs. guano for turnips.

From the result I consider turnips an excellent crop to prepare the ground for oats. J. C. TAYLOR. *Holmdel, N. J., July* 23, 1857.

P. S. To show the size o the oats on the strips, I would mention that one week ago I measured some pulled up by the roots—their length was six feet and one half inch.

2d P. S. I find the above put away safely, but on looking it over, thought it might be worth publishing, so I send it thus late. J. C. T.

## How Manure is made in Switzerland.

In the first number of vol. x. of the COUNTRY GENTLEMAN, appeared an article on the management of manure in Switzerland, by S. W. JOHNSON. A prolonged stay last year in the French part of Switzerland, and the acquaintance of some of the best farmers, gave me an opportunity to know and study thoroughly their method of making and saving manure, and before and after I went there, I had tried it enough to know that it can be employed here with great benefit and little trouble. To-day, being at leisure, I will try to give you a short description of it, with the hope that it may benefit some of your numerous correspondents.

On the farm of Mr. C, of Moulhey, near the Lake of Neufchatel, I had the opportunity of seeing that method carried into effect in as easy and simple a manner as possible. Mr. C. is considered one of the best farmers of the Canton de Vaud, and I was fortunate enough to get introduced to him, and spend a day on his farm; and with a kindness and politeness seldom equalled, seeing my interest in agricultural matters, he showed me all over his property, pointing out the many improvements, and thus by his agreeable and interesting conversation, giving me the best lesson in agriculture I ever received. If it was not out of my subject, I should like to give you a description of his beautiful farm, but I shall speak only of that important part, the manure heap.

Mr. C.'s farm buildings are situated on the top of a hill gently inclined towards the lake. His stock consists of forty cows, five yoke of oxen, and six or seven horses.

The manure is carried to the heap every day, the litter thoroughly mixed with the dung, and saturated with the urine. The heap stands about twenty yards from the buildings, a little lower down the hill, and is built in the manner described by Prof. JOHNSON, with the exception of plaster of Paris, which is not used. The cistern is built a little on one side of it, so as to receive all its drainings, and also the surplus liquid from the stables. About one hundred yards lower down, on a level spot, Mr. C. collects all the numerous materials for compost so easily found on a farm, adding to it scrapings from the road and ditches, heaping the whole carefully in a large square pile, and keeping the top of it always level and loose.

Taking advantage of the inclination of the ground, he had a pipe laid from the cistern there, and every two or three weeks, by its means, he drenches thoroughly the compost heap, thus making it every way equal to the best stable manure. An artificial pond by the side of it, receives its drainings, and the water of the fountain at the house; when full its contents are let loose, and irrigate many an acre of fine meadows that lie beneath.

By such admirable management, every particle of manure made on that farm is saved, and the natural result is that although wheat and colza are the staple crops raised by Mr. C., he has, without the help of any foreign manure, improved the quality of his land in a very remarkable manner, and that in a country, where to keep up the land in a fair condition, it must be heavily manured every third or fourth year.

On another farm, in summer, the liquid manure of a few cows was pumped from the cistern into a barrel on a cart, and spread on a field of sainfoin, used for soil-

ing, with such good effect that five and six good crops were cut from it in the course of the summer.

No greater contrast could be found, than in the different way in which every article fit for manuring is treated in that country and in this. There, every thing is scraped, gathered, saved—here, on the contrary, waste can be seen on almost every farm. It is true, all the Swiss cultivators cannot use such perfect method as that followed by Mr. C. They have not the money, nor the space to fix their barn-yards; but they all have a well built manure heap, with a cistern or a tank, whose contents serve to keep the pile moist.

I never saw gypsum used, and do not believe that it is employed except by a few farmers.

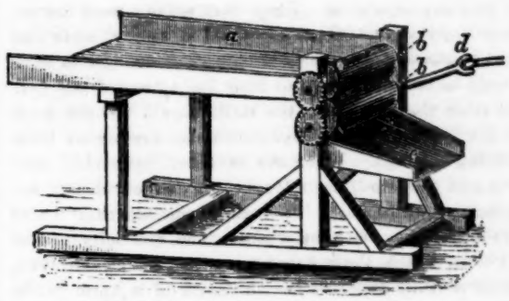
A method often followed there, and which can be employed here with advantage, as I know by trial, is this: They dig their stables so that being lower behind than at the trough, it will hold a certain amount of manure without disadvantage to the animals. Every night a heavy litter of straw is put in; and the manure is drawn out only once a week, or once every two weeks. In this way the urine is soaked in the straw, and after being carried to the pile, the slight fermentation converts it into very good manure. It is not as desirable a method as the other; it takes more straw or litter of any sort, and more work, but it is more simple and easier to carry into effect. I followed it long enough to know that in that way more than double the amount of manure can be made, compared with the ordinary manner generally employed here. A *great deal* of litter must be used, and for that purpose wheat straw is the best and cheapest, and the farmer who lets his rot on the field where it was thrashed, and his cattle be out in the open air, is blind to his own interest.

The object of this letter is to support the opinion of Prof. JOHNSON. He said: "That method deserves to be known and tried in this country." I have seen it carried into effect in Europe; I tried it here, and it is my firm belief that it is worth more than a passing thought from all the farmers who wish the advancement of Agriculture. ALBERT CHAVANNES. *Knoxville, Tenn.*

### Feeding Hogs in Orchards.

Will feeding hogs in an apple orchard, the trees being 8 or 12 inches in diameter, be likely to injure them? Wishing to improve the soil in mine, I have fattened 24 head, weighing perhaps 250 lbs. each, on about three-fourths of an acre, feeding to them some 400 bushels of corn,—the soil clay (not tenacious however,) and resting on limestone at 6 or 8 feet below, and originally covered with sugar maple. I shall plow it in the spring as soon as may be, and probably plant corn for fodder, or pumpkins on the clearer part of it and between the rows. R. HATTON. *Waynesville, Ohio.*

We have been long familiar with the practice of allowing hogs to feed on the fallen fruit of orchards, running for months among them, and never knew them to injure large or bearing trees. If they shade the ground much the crop of corn fodder will be small, but the cultivation will be of great benefit to the fruit. If many of the roots are quite near the surface, we would prefer plowing with a gang-plow, (being cheaper and shallower) unless in sod. It is better to mutilate the roots some, than to neglect cultivating.




**Herendeen's Sugar-Cane Mill.**

In answer to the frequent inquiries for the best mode of expressing the juice of the Chinese sugar cane, adapted to the wants and means of common farmers, we now furnish a figure and description of the contrivance adopted the past autumn by GIDEON HERENDEEN of Farmington, Ontario Co., N. Y., whose experiments in making molasses from the cane, have been more successful than any others we have met with—more especially as regards the process of expressing the juice. The molasses was found superior in quality to common cane molasses, but not equal to that of the sugar maple, nor to some other samples obtained from the Chinese cane. It was, however, evaporated in a common potash kettle—it is intended another year to use suitable evaporating pans, when the result will no doubt be a better article, and be furnished at less cost. The actual expense in this case, including cost of seed, use of land, fuel, and all other expenditures, was about *sixteen* cents per gallon—and he assures us he could sell it at a good profit for twenty-five cents per gallon, should he manufacture it for market. The molasses is found excellent for buckwheat cakes and mince pies. The mill is not patented—it is attached to a common horse-power, used for driving a threshing machine; is worked by one horse—and did not cost far from ten dollars.

The cane was planted late in spring, (one pound of seed to half an acre,) in drills 4 feet apart, and a part of it in thin drills with plants one foot apart, and the rest in thicker drills 4 or 5 inches apart. The thick drills yielded the most, and are preferred. For some time the young plants had so small and puny an appearance, that one-half was plowed up for buckwheat, leaving only a fourth of an acre for experiment. From this 55 gallons of molasses were obtained.

Before cutting up the cane in autumn, a man passed along the rows and stripped off all the leaves, which was done with great expedition, by merely stroking his hand downwards around each stalk, as fast as another could cut the stalks. The leaves were suffered to lie on the ground till sufficiently dry, when they were raked and drawn in for fodder. Two good two-horse loads of leaves were thus obtained from the quarter-acre.

The mill consisted substantially of two cast-iron rollers, six inches in diameter, and turning together, not faster than one revolution in three seconds. These rollers were turned smooth and perfectly true,* and their faces fitted together with great accuracy, and on this accuracy and the slowness of motion, the success

* They had been made for some other purpose, and were purchased cheaply at a foundry, hence a reason of the mill costing so little. They were hollow, with solid heads.

in pressing depended. They were set in a wood frame, so as to be at first about one-third of an inch apart, so that in passing the cane between them the *joints* only would be crushed, and but little juice pressed out. If set more closely at first, the stalks would be broken off at the joints, and they would thus be prevented from passing through. When the cane had been thus broken and prepared, the rollers were wedged closely together, so as to be in such close contact that water could not run between them. The elasticity of the wood in which their axles were set, would, however, allow them to separate the thickness of a knife blade when the stalks were passing through—and after the passage the stalks would be as dry and flat as the shavings from a carpenter's plane; while on the other side the juice would break and spout out so as to form a stream from the trough below larger than one's finger.

In the figure, *a* represents the trough in which the cane is laid for feeding the mill, being quite similar to the trough of a common straw cutter; *b b* are the two cast rollers, made to work together by cog-wheels on their ends. At first the cog-wheels were omitted, with the belief that one roller and the stalks would draw on the other roller; but this failed in practice, and hence the cog-wheels were added. The trough *c*, for receiving the juice has a width equal to the length of the rollers, and contracts a little towards its lower part, a tub the size of a wash-tub being placed beneath to receive the cascade of juice. The lower roller is turned by the horse-power of a common threshing-machine, by the long rod, and the universal or "knuckle" joint, *d*. In order to obtain slow motion, a bar of wood ten feet long, was lashed or spliced on the common bar to which the horses are attached,—thus giving the horse a wide circle to travel in—at the same time that all the cog-wheels were removed or taken out, except the first or main horizontal one, and the pinion working into it, on the long rod connected with the lower roller. In this way the horse in travelling three feet moved the rollers only five or six inches, and thus gave them great power.

Crushing the stalks and expressing the juice were but a very small part of the labor of manufacture—a half day was sufficient to pass through two tons of stalks. Lime was used to clarify and sweeten.

The following is a statement of the expense:—

| | |
|---|---|
| Plowing a quarter of an acre, | $ 75 |
| Seed, | 50 |
| Planting, | 50 |
| Cultivating, | 2.00 |
| Cutting up stalks, &c | 2.00 |
| Labor of grinding and evaporating, | 5.00 |
| Interest on land, | 2.00 |
| Fuel, | 1.50 |
| | $14.00 |
| Deduct value of 2 loads of leaves, | 5.00 |
| Cost of 55 gallons of molasses, | $9.25 |

## Remedy for Garget in Cows.

I had, a few days since, a new milch cow whose bag was very badly caked—so much so, that the usual remedies of cold water, soap-suds, spts. camphor, &c., had no effect upon it. I asked our family physician for a prescription, who gave me this:

1 part aqua ammonia,
2 parts sweet oil,

well rubbed in twice daily. In two days a cure was effected. W. J. PETTEE. *Salisbury, Ct.*

## Remedy for the Curculio.

EDS. CULT. AND CO. GENT.—I read in the Cultivator that if the ground under plum trees was paved, it would stop the work of the curculio, and that suggested the plan of covering the ground under the trees with boards. I took some old boards when the tree was in blossom, and after spading up the ground, laid down the boards, covering the ground as far as the limbs extended, and laid some narrow strips on the cracks, so as to completely cover the ground. The result was a full crop of fine plums. The tree was so full that I picked off some of them when very small. Variety Imperial Gage.

A neighbor of mine took some sediment of a grindstone trough, and spread it on the ground, and spread some gravel on the top of that, and the iron that was in the sediment cemented the whole together, and formed a hard crust, and he had a fine crop of plums. I think there are objections to the cement, for the tree cannot be manured or cultivated; but the boards can be moved when the plums are out of the way of the curculio.

Will some of your readers try the boards, and communicate the result? JOSEPH E. PHELPS. *Worcester, Mass.*

A. BRAMAN, of Ithaca, N. Y., informs us that his remedy against the curculio, is the well known method of allowing poultry to run among the trees, to which he adds the practice of dusting the trees frequently with air-slacked lime until the fruit is out of the way of the insect. His plum orchard is 66 by 200 feet, and contains some apricots and nectarines—he has 40 varieties of the plum, and he is compelled to thin out one-third or one-half the fruit when partly grown to prevent the trees from breaking down. The remedy has also answered well for apricots, but the nectarines are destroyed, and he intends to cut the trees down.

## Pumpkin Seeds Injurious to Ducks & Geese.

L. TUCKER & SON—I notice in your Country Gentleman of the 14th inst., an inquiry, "whether pumpkin seeds will kill ducks and geese." As to their killing ducks, I have no doubt; with respect to their killing geese, I cannot speak from experience, but have very little doubt they would produce the same effect when eaten raw or unground.

In the fall of 1856, I sent from Yacht Cove, N. J., a dozen ducks of unusual large size, which had been raised along the shore of "York Bay." On my return home a short time after, I found eight of them had died, and the four others had their legs so paralized that they could not walk, although they managed to swim; and upon inquiry I found the eight had been similarly affected previous to their death. I opened some of the dead ones, and found nothing in their intestines, &c., but a quantity of raw pumpkin seeds, the other food having been digested and passed off. I then took the four live ones, and stuffed and fed them for three or four days with boiled corn meal, boiled potatoes, bread, &c., keeping their stomachs filled with digestible food, and they all four recovered, and are now alive and well. I presume they either digested the pumpkin seeds in the course of the three or four days, or passed them away with the other food. I now never allow my ducks or geese to eat pumpkin seeds unless they are ground or boiled, and would advise others to go and do likewise. CHAS. F. MORTON. *Mill Farm, Mortonville, N. Y., Jan. 16.*

### Premium Crop of Ruta Bagas.

The sample of ruta baga turnips, which I enter in competition for the best acre, are a sample of our crop, which I grew the past season, on a slaty light loam, on which we grew in 1856, potatoes and cabbage, to which crops we gave barn-yard manure.

This spring we gave it no manure, except a little superphosphate of lime in the drills to start the seed. The following is my treatment and the expense of culture. The yield was 1,117 bushels, of 62 pounds to the bushel. Weight of the above, thirty-four tons, twelve hundred and fifty-four pounds. For what I have sold, we got three shillings a bushel.

June 12—Plowed for turnips—13. Harrowed and rolled—15. Drills opened by hoe (the ground level,) at 30 inches apart, as follows: Make one straight line; from this let your men commence at 30 inches, laying the corner of the hoe on the ground; they then walk on as fast as they can, leaving a light mark (angular); then returning as going down. Let another man follow with the superphosphate of lime, and sow on these drills as thick as you sow plaster on clover. I applied to this acre 200 lbs. of superphosphate, 200 lbs. of plaster, 12 wheelbarrowfuls of muck, saved in a shed during winter and broken fine as ashes, mixing these three well together before applying. This is to get the seeds as quick as possible over ground.

I then sow as follows: Take five or six seeds (or as near as you can without counting,) between your finger and thumb. Drop three of these in one place at a foot apart; keep your finger and thumb in quick motion, and move along as quick as you can. This requires no science, as the men who sowed ours this spring were laboring men, who had never seen a turnip seed to know it.

When your seed is dropped, place yourself at the head of your drill (like a soldier standing at ease;) move your heels into the hollow of each foot, placing your hands behind your back to move steadily along, and move on quickly; this draws a sufficiency of earth to cover your seed, as when covered too heavily they do not come up quickly, and a number will not germinate. I used on this acre *three ounces of seed.* When all is sown and covered, pass the roller over it. This must be done in dry weather.

My plants came up from one to four in each place, at a distance of a foot apart all through. The economy in this system is that it does not take one-twentieth the time to thin that it does when they are sown by drill, and your plants are a great deal stronger when they come up thin than when they are thick, and in hoeing, (using no hand work to thin them,) by passing your hoe between the plants, you take out the extra ones, (leaving but one plant,) and cut out all weeds between them. I never hand-hoe the rows, passing a horse-hoe between them before I commence to thin them; immediately after thinning, passing the horse-hoe again through them, and repeating the horse-hoeing as the weeds appear. If you once let the weeds get ahead of you, you will be obliged to hand-hoe them, which will cost you as much as your crop will be worth, for then you will not have more than a half crop. When your leaves nearly meet in the center, you can discontinue working them.

Every farmer should grow his own turnip seed. He is then sure of having a good start. I have never lost a crop of turnips by fly but one, and that I attributed to bought seed, (of seed dealers,) which will be old and new mixed.

The best thing to prevent fly is to use new seed, sow as near to the surface as possible, sowing first on drills wood ashes, guano or superphosphate of lime. To grow fine turnips and keep your ground in good heart, you should apply from 30 to 50 bushels of bone dust per acre. This is the best manure for a turnip crop.

June 30th—Horse-hoeing turnips—July 2. Hand-hoeing—4. Horse-hoeing—17. Horse-hoeing—Aug. 3. Horse-hoeing.

Nov. 14 and 16—Pulling turnips.

Nov. 17—Plowed turnip tops in as a manure.

Total expense of cultivating, special manure and seed, for the above acre of turnips, $21 50.

Value of the above at three shillings per bushel, $413,37½. GERALD HOWATT. *Newton, N. J.*

### Shoemaker's Scraps for Manure.

MESSRS. EDITORS—A. R., Red Bank, N. J., inquires whether leather cuttings of shoemakers are of any value as a manure. Some fifteen years ago I found in our village a pile of shoemaker's cuttings, which had been accumulating for some twenty years from a considerable manufactory. Having seen in the Genesee Farmer, that a small portion had been used and produced an extraordinary effect upon a poor piece of land, I got permission to remove about fifteen cords, as they were considerd a nuisance. I found all that the Genesee Farmer's correspondent said to be true. I put it on as we usually put on barn-yard manure; but found that I should have extended it over at least double that quantity of ground, for the first crops of wheat and oats grew much too strong —much of it lodged. The third year corn was planted. A dry season coming, I had no corn of any consequence only where the leather cuttings were put. It had the effect of keeping the ground so wet, that it was plowed too wet. Much of the leather is seen yet in plowing.

The shavings from the tannery, of leather before oiling, I have tried since, but they do not produce the effect that the shoemaker's cuttings do. I would advise A. R. to collect all he can, and I think it will pay. W. H. W. *Newville, Pa.*

### Measuring Corn in the Crib, &c.

EDS. CO GENT.—A correspondent in your paper of Dec. 17, 1857, gives an excellent and perfectly correct rule for determining the number of bushels in a crib or bin, but the operation may be materially simplified, viz., by multiplying the cubic contents in feet by the decimal eight-tenths—thus, 1600 cubic feet by .8, gives 1280.0 bushels; and for the heaped or coal bushel of 2688 inches, multiply by sixty-four hundredths, or, for greater accuracy, by six hundred and forty-two thousandths, thus: 1000x.642=642.0 bushels. I would buy or sell corn or coal by the above measure in large quantities in preference to measuring by a sealed bushel, as I am convinced that the result will vary less from the truth, which may be proved by weighing.

An easy rule to calculate the number of barrels in a cistern, is to divide the cubic contents in feet by four and twenty-one hundredths. Example: a cistern, containing by measurement 500 cubic feet, divided by 4.21, gives 118.8 barrels, or a barrel to every inch in depth for 50¼ square feet of horizontal section. P. A. WAY. *Sewickly, Pa.*

### Planting Fruit Trees, Nurseries, &c.

We have received a numerous list of inquiries from M. D. M. of Athens Co., Ohio, (the postoffice illegible,) in relation to the nursery business, with which he is at present entirely unacquainted, except by reading. As we receive numerous inquiries of this kind, and cannot write a long letter in answer to each separately, we are compelled to reply in a general way through our columns.

*Currants are raised from seed*, by washing the pulp and preserving the seed moderately moist till planted. The soil should be a very fine, rich mould; the seed should be sown and covered not more than half an inch deep, and the soil kept moist and shaded till the young plants get a good foot-hold. The treatment is quite similar to that of raising mountain-ash plants—or like apple and pear seedlings, except on a smaller scale, and with a finer and more shallow covering of mould, according to the smallness of the seed.

*Quince seed* are to be treated precisely as apple seed. A more moist soil is however preferred generally; but if rich enough, this is not essential.

*Cherry stones* should be planted or buried before even the exterior becomes dry—or else packed immediately in moist sand, and kept moist. Those that have been dry, in bags or boxes, till the present time, will probably be entirely worthless. Our correspondent may however try the experiment of pouring hot water on them, and then exposing them to freezing—this, if repeated several times, may cause some to grow. Small quantities should be taken at a time, in order that the hot water may cool immediately. The great cause of such common failure in the vegetation of cherry stones, is the dryness of the shell—but the treatment we have just mentioned is most likely to overcome the difficulty after they have become dry. Planting in the common way is entirely useless.

*Peach pits*, after cracking, will dry and spoil in a few hours. If they cannot be planted at once, they should be packed in moist sand, peat, or pulverized moss. Peach stones always grow best if previously mixed *with earth*, and in this condition allowed to winter in an exposed place. We never found them to grow with any certainty, unless each separate stone had been in contact with earth through the winter before cracking.

*Apple seeds*, which have been allowed to remain in the pomace for many days, are usually spoiled by the heating and fermenting of the heap. The specimens forwarded by our correspondent have been nearly all ruined in this way. Good seed are packed full of the plump *white* kernel—injured ones have a more horny or waxy appearance, and partly shrivel after drying a few days, and the horny covering separates from the inner portion.

In regard to the *Nursery Business* in general, we would discourage every one from engaging in it to any extent, until it is *thoroughly* understood. Every person who wishes to understand it, should hire to some good establishment, and labor with his own hands for two or three years, before undertaking for himself. He may learn, it is true, by constant experiments, but his knowledge will be slow and costly, and on many points, imperfect. There is no business more overrun with quacks, than that of the nurseryman; and nothing has disgraced it more. It would be much better for a carpenter or a blacksmith to begin working at his trade without any practice or experience. Like every thing else, it must be well understood, to be attended with success or profit, no matter how favorable the opening may be.

We are unable to answer the other queries of our correspondent, with satisfaction.

### English and Scotch Dairy Management.

MESSRS. EDITORS—About thirty pages of the lately issued Ag. Report from the Patent Office are occupied with details on various departments of dairy management in England and Scotland, such as the selection and feeding of cows; the making of butter and cheese; the feeding of calves for veal or stock; and, generally, the economic management of this important department of industry.

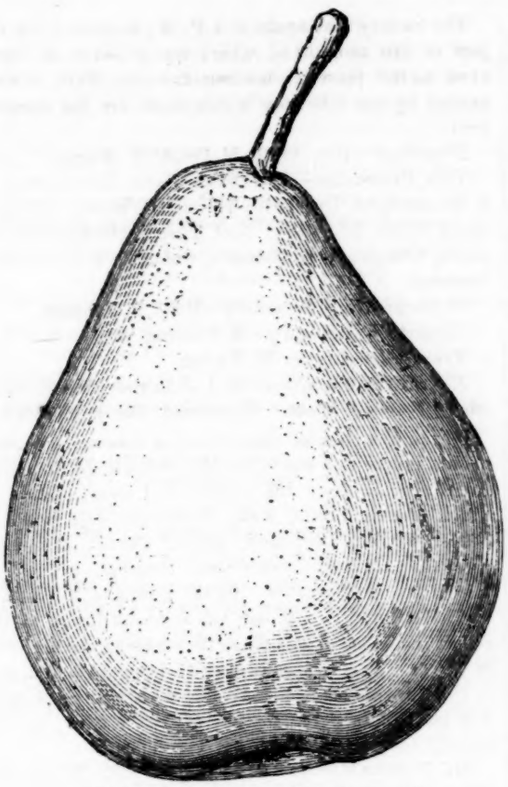
Gloucestershire is extensively known as a cheese-producing county. About nine-tenths of the land, on all the dairy farms in this district, is under pasture. The usual practice is to keep about 25 cows for every 100 acres, or one cow for every four acres, on the whole farm, besides the young stock needed to maintain the full complement of cows. Where less land is in grass and more in tillage, fewer cows are kept, of course, in proportion to the whole land.

One acre and a half of pasture grass is the usual allowance to each cow, during the summer and fall. During the winter and spring months, hay is almost the only food given; and as each cow will consume two and a half tons, it requires the same extent of land—one and a half acres—for the winter as for the summer keep. The expense of feeding a milch cow for twelve months is calculated at $20 for grass—one and a half acres—in summer; and for the grass of a like quantity of land, with expense of making it into hay, $25 is the usual allowance, which amounts to $45 per annum. In Cheshire, another county famous for cheese, the cost of keep for a cow is calculated at $17.50 during the season of pasturing, and at $27.50 during the winter.

From 500 to 550 gallons of milk is considered to be about the average yearly produce per cow in Gloucestershire. As a gallon of full milk will make a pound of cheese, the whole quantity of cheese that could be made from the milk of one such cow, would be upwards of 500 lbs. As only from 300 to 350 pounds of cheese are actually made, on an average, from each cow, it appears that about a fifth of the milk is consumed in rearing calves, supplying the farmer's family and servants, &c. In Leicestershire, where the cows are usually fed higher than in Gloucestershire, being allowed roots, bran, meal, linseed boiled, &c., the annual product of a cow in cheese amounts to 500 lbs. This extra quantity of cheese, with the additional richness of the manure made, is considered a full compensation for the additional expense of the higher keeping.

How do the foregoing figures compare with those which some of our own cheese dairies could furnish? A.

SHEEP FOR SOUTH AMERICA—We learn that GEO. CAMPBELL, of Westminster, Vt, has just sold to Messrs. COFFIN & HAYES, ten Spanish Merino rams from his flock in Vermont, and two Silesian and two French rams from the flock of Messrs. CHAMBERLAIN & CAMPBELL of Red Hook, to be sent to Buenos Ayres, to improve the sheep of that country.



**The New Pears**—(CONTINUED.)

COMTE DE FLANDRE.—Rather large, pyriform, oblique; skin greenish yellow, becoming yellow at maturity, with numerous small dots, and marked with thin russet; stem an inch long, set under a lip, with little or no depression; calyx in a shallow basin; flesh very juicy and melting, with an agreeable, refreshing flavor; quality "very good." Tree vigorous and productive. Season, late in autumn. Although this pear is hardly so high flavored as some of our finest varieties, yet when well ripened, its juiciness and agreeable aroma, render it one of the most delicious sorts.

## The Tartar or Chinese Sheep.

Having received an inquiry in regard to these sheep, we addressed a note to a gentleman in Saratoga county, who we knew had some of them. His reply is as follows:

GENTLEMEN—Your note of Jan. 20th, has been received, and in answer to your inquiries, I briefly give you the result of my experience with the Tartar sheep, In the spring of 1856, I received three ewes and one buck lamb. Since that time they have produced twenty-three lambs—a number died at the birth. I think one cause of their dying was breeding too fast. The ewes did not recover strength enough for the second crop of lambs. I shall let them have lambs but once this year, in order to see whether they will do better by breeding once or twice in the year.

From my experience thus far, it is my opinion they will be a very profitable mutton sheep. They come very early to maturity, and I have tested as far as I was able, the quality of the mutton. It is very fine flavored, juicy, and entirely free from the strong taste of many other varieties.

They are different in some respects from all other sheep that I am acquainted with, in their quiet, peaceable habits. When put into a field they don't wish to leave it, and I doubt whether they could be driven over a three rail fence.

They are very hardy, and appear to stand this climate as well as any other sheep in the country.

The wool will not be very valuable. I think it only fitted for the coarser fabrics, such as carpets, horse blankets, &c.

It is my opinion, when we take into consideration their rapid breeding and mutton qualities, that they will prove a valuable acquisition to the country.

## Buckwheat for Swine.

The Country Gentleman, Vol. XI, No. 3, mentions two cases of buckwheat bran proving injurious to young pigs, by being fed to sows suckling them—and inquires whether any cases of the kind have fallen under the notice of the readers of that sheet. We would say that a case precisely similar to those mentioned, occurred in a litter of fine pigs, belonging to one of our neighbors. His sow dropped seven thrifty pigs, of much promise. A few days after birth, without any apparent cause, one after another of the pigs became weak, lame, and puny in all respects, and nearly half of them died. Only three remained unaffected.

The sow was attacked with piles, soon after, and at this juncture their owner applied to us for information. We recommended to discontinue feeding buckwheat. He accordingly did so; the pigs grew thriftily, and the sow recovered from her piles almost immediately. A thrifty sow, belonging to another neighbor, fed upon buckwheat, mixed with other grain and slops, was a few weeks since attacked with piles. An impression exists in this vicinity, handed down by our good Dutch ancestors, that swine fed upon buckwheat are liable to attacks of piles; also, that swine bedded with buckwheat straw are subject to scurvey. What is the experience of your correspondents? DUNHAM & WOOD. *Etna, Tompkins Co., N. Y.*

In November last I lost a very fine litter of six Suffolk pigs, and I know of no other cause than feeding the sow buckwheat bran. They died at intervals of about a week; but they were affected very differently from those spoken of by Mr. Reynolds in the Prairie Farmer. Mine were very fat; one of them that died when four weeks old, weighed 25 pounds. They appeared to choke or smother on account of being so fat. E. M. McC. *Walnut Hill, near Newcastle, Pa.*

ALBANY COUNTY AG. SOCIETY.—At the annual meeting of this Society, held in this city on the 13th inst., the following officers were elected:

President—WM. HURST of Albany.
Vice Presidents—J. Winne of Bethlehem; D. V. S. Raynsford, New Scotland; Wm. Bullock, Bethlehem; Henry I. Devoe, Bern; Dr. P. B. Noxon, Watervliet; Gordon Gallup, Knox; Joshua Aley, Rensselaerville; D. Fredenburgh, Coeymans; Dr. R. S. Lay, Westerlo; Peter Vedder, Guilderland.
Directors—Wm. Little, Coeymans; John Waggoner, Guilderland.
Secretary—A. L. Chatfield, Albany
Treasurer—H. L. Emery, Albany.

FEEDING.—If all farmers should feed all their cattle food so as to save all the nutriment, it would nearly double the value of their products.—*Prof. Nash.*

## The New-York State Agricultural Society.

The Annual Meeting was opened, pursuant to notice, in the Assembly Chamber, in this city, Feb. 10, the President, Hon. A. S. UPHAM, taking the chair, and his Excellency Gov. KING, an ex-President, occupying a seat at the right of Mr. U. Hon. M. P. WILDER, ex-President of the U. S. Ag. Society, being present, also accepted an invitation to take his place with the gentlemen named,—after thanking the Society for the honor thus conferred, and expressing his deep interest as an honorary member in all its transactions, as well as in its future prosperity and success.

The Report of the Treasurer, B. B. KIRTLAND, Esq., was then read by Secretary JOHNSON, Mr. K. being detained at home by ill health. A summary of this is given below:

RECEIPTS.

| | | |
|---|---|---|
| Note discounted, February, avails, | | $4,126.50 |
| Received from State, | | 4,595.77 |
| " | Annual Meeting, | 266.00 |
| " | State Appropriation, | 700.00 |
| " | Entomological Appropriation, | 1,000.00 |
| " | Note discounted, | 981.98 |
| " | Buffalo—Tickets and Members, | 15,073.89 |
| " | " —Buffalo Committee, | 800.00 |
| " | " —Rent of Grounds, | 200.00 |
| " | " —Sale of Lumber, | 45.45 |
| | | $27,789.59 |

PAYMENTS.

| | |
|---|---|
| Balance due Treasurer last year, | $955.07 |
| Balance note 1857 paid, | 2,502.40 |
| Note due May paid, | 4,200.00 |
| Note due September paid, | 1,000.00 |
| Expenses Winter Meeting, | 74.56 |
| Premiums " | 572.50 |
| Premiums Watertown Fair, | 291.15 |
| Museum Expenses, | 184.70 |
| Library Expenses, | 56.88 |
| Printing, Advertising and Stationary, | 728.43 |
| Postage, | 203.53 |
| Incidental Expenses, | 267.69 |
| Salaries Secretary and Assistant Treasurer, and travelling expenses, | 3,002.95 |
| Fair Superintendents, | 551.70 |
| Clerks, Business and Treasurer's offices, and with Committees, | 838.00 |
| Gate Keepers, | 330.00 |
| Miscellaneous Expenses at Buffalo, | 1,188.01 |
| Erections on Ground and Lumber, | 374.45 |
| Police, | 498.50 |
| Entomological Survey, | 1,000.00 |
| Premiums paid, | 5,767.16 |
| Invested Bond and Mortgage Security, | 2,000.00 |
| Cash on hand, | $1,201.91 |
| | $27,789.59 |
| Medals and Premium Books on hand, | $140.00 |

This report having been accepted, that of the Executive Committee followed—reviewing the history of the past year in the Society's annals—commenting on the progress of the cause to which the Society is devoted—referring to the Agricultural College, its present condition and prospects,—and embracing throughout much that could but be very gratifying to the Society's retiring officers as well as to its other friends, and those of the Agriculture of the State.

On motion of E. P. PRENTICE, Esq, the committee of three from each judicial district on the nomination of officers, &c., was selected—and the following gentlemen being named by their respective constituents retired for consultation:—1st district, Messrs. C. M. Saxton, Benedict, S. Jones, Jr.; 2d, Wm. Kelly, L. G. Morris, John Harold; 3d, Wendell, Tibbitts, Newcomb; 4th, White, Cheever, Platt; 5th, Randall, Faxton, Turrill; 6th, Barber, Law, Clark; 7th, Dwight, Wm. Johnson, Van Slyck; and 8th, Buell, Labar, Allen.

The Society met again at 4 P. M., to receive the report of this committee, which was in favor of SYRACUSE as the place for holding the next Fair, accompanied by the following nominations for the ensuing year:

*President*—Hon. W. T. McCOUN, of Queens.

*Vice Presidents*—Edward G. Faile, New-York; C. S. Wainwright, Dutchess; Herman Wendell, Albany; Hugh White, Saratoga Joel Turrill, Oswego; F. M. Rotch, Otsego; Wm. Johnson, Ontario; E. C. Dibble, Genesee.

*Corresponding Secretary*—Benj. P. Johnson.

*Recording Secretary*—E. Corning, Jr.

*Treasurer*—Luther H. Tucker.

*Executive Committee*—G. J. J. Barber, Jas. M Ellis, Alaric Hubbell, Walter Aikenhead, Jas. O. Sheldon.

On the reception of this report, a discussion ensued upon a proposition made by Mr. Schoelfield, to strike out *Syracuse* from the report and insert *Utica*, in which Messrs. Lewis, Kelly, Toby, Geddes, Randall, Jones, Clarke, Dickinson, Allen, Turrill, Robinson, Newcomb, Miller, Dorsheimer, Cheever, and others were active participants. In the course of it a motion was substituted to call over the roll, and insert in the report the name of the place then having the majority of voices. This was finally voted down, 57 to 102, and as this furnished a test vote, the Committee's Report was immediately on motion of Mr. KELLY, unanimously adopted.

Mr. DIBBLE introduced the subject of Mr. MORRILL'S Bill now before Congress, granting lands for the endowment of Agricultural Schools in the different States, and resolutions advocating its passage were adopted. Mr. KELLY expressed the sincere regret of the Society that its late Treasurer, B. B. KIRTLAND, Esq., had been compelled by ill health to resign his post, and resolutions embodying this sentiment, with the thanks of the Society for his valuable services, were passed.

In the evening, a session was held at which a letter was read from the American Legation at Paris, stating that Persia had requested copies of the Transactions of this Society, and wished to take part in the system of scientific exchange, also containing a list of some of the most important of the foreign agricultural and scientific societies with which the society is now in communication.

A lecture was then delivered by Prof. PORTER of this city, upon the Atmosphere, its general services to man, and its component ingredients—illustrating his remarks with some interesting experiments. On its conclusion a vote of thanks was passed.

Thursday was devoted by the committees of Judges on Grains, Dairy products, Fruits, &c., to an examination of the rather slender (for the State of New-York) exhibition of these, in the Society's rooms, and the list of prizes, awarded by them, was read at the opening of the evening session, as follows:

### PREMIUMS AWARDED

FARMS.

Grain Farm—R. J. Swan, Rose Hill, Fayette, Seneca Co., —Plate, valued at $50

Dairy Farm—Zadock Pratt, Prattsville, Greene Co., —Honorary Diploma of the Society.

FIELD CROPS.

Best Crop Spring Wheat—E. C. Bliss, Westfield, Chatauque Co., $15

Best Crop Rye—John Potter, Marcy, Oneida Co., 15

Best Crop Buckwheat—P. W. Peck, East Bloomfield, Ontario Co., 8

2d best do.—B. S. Carpenter, Elmira, ..... 5
3d best do.—C. W. Eels, Westmoreland, Oneida Co., Trans.
Best yield of Syrup from Chinese Sugar Cane—E. C. Bliss, Westfield, Chatauque Co., ..... 5
Best Crop Peas—Miss Amanda Newton, E. Bloomfield, 8
2d do.—L. L. French, Richfield, Herkimer Co., ..... 5
3d do.—L. L. French, " " ..... Trans.
Best Crop Beans—E. C. Bliss, Westfield, Chau. Co.,.. $8
Best Crop Sugar Beets—E. M. Bradley, E. Bloomfield, 8
Best Crop Carrots—E. M. Bradley, East Bloomfield, 8
2d do.—E. S. Hayward, Brighton, Monroe Co., ..... 5
Best Crop Timothy Seed—C. W. Eels, Westmoreland,. 5
2d do.—E. S. Hayward, Brighton, Monroe Co., ..... 3

GRAINS, ETC.

Best Bushel Winter Wheat—Amos Goulding, Le Ray, Jefferson Co., ..... 3
Best Bushel Spring Wheat—A. E. Van Allen, Defreestville, Rens. Co., ..... 3
2d do.—G. K. Eels, Clinton, Oneida Co., ..... 2
3d do.—Amos Goulding, Le Ray, Jefferson Co., ..... 1
Best Bushel Rye—David Conradt, Brunswick, Rens. Co., ..... 3
2d do.—Amos Goulding, Le Ray, Jefferson Co., ..... 2
3d do.—Wm. Richardson, Albany Co., ..... 1
Best Bushel Two-Rowed Barley—Norman Gowdy, Lowville, ..... 3
Best Bushel Oats—C. W. Eels, Westmoreland, ..... 3
2d do.—David Conradt, Brunswick, Rens. Co., ..... 2
3d do.—W. P. Ottley, Phelps, Ontario Co., ..... 1
Best Bushel Yellow Corn—C. W. Eels, Westmoreland, 3
2d do.—W. Newcomb, Johnsonville, Rens. Co., ..... 3
3d do.—David Conradt, Brunswick, Rens. Co., ..... 1
Best Bushel White Corn—David Conradt, Brunswick, 3
Sample Dried Sweet Corn—L. L. French, Richfield, Herkimer Co., ..... Silver Medal.
Best Bushel Peas—Amos Goulding, Le Ray, Jeff. Co., $3
2d do.—L. L. French, Richfield, Herkimer Co., ..... 2
Best Bushel Beans—Edwin Miller, Constableville, Lewis Co., ..... 3
2d do.—David Conradt, Brunswick, Rens. Co., ..... 2
3d do.—Wm. Newcomb, Johnsonville, Rens. Co., ..... 1
Best Bushel Timothy Seed—Edwin Miller, Constableville, Lewis Co., ..... 3
2d do.—E. S. Hayward, Brighton, Monroe Co., ..... 2
3d do —C. W. Eels, Westmoreland, Oneida Co., ..... 1
Best Bushel Buckwheat—Henry Schoonmaker, Bethlehem, Albany Co., ..... 3
2d do.—Wm. Richardson, Bethlehem, Albany Co., ..... 2
3d do.—L. L. French, Richfield, Herkimer Co., ..... 1
Best Bushel Flax Seed—Henry Wier, Johnsonville, 3
2d do.—W. Newcomb, Johnsonville, Rens. Co., ..... 2
Best Collection Grasses and Herbage—Mrs. J. T. Van Namee, Pittstown, Rens. Co., ..... 15
Sample Potatoes—Wm. Richardson, Bethlehem,.. Trans.
Dioscorea Batatas—J. G. Sickles, Stuyvesant, Columbia Co., ..... Trans.

DAIRY PRODUCTS.

Best Three Tubs Butter—S. H. Case, Oswego, Oswego Co., ..... Cup valued at $15
2d do.—A. M. Haight, New-Lebanon, Columbia Co., Cup valued at $10
3d do.—J. S. Holbert, Chemung, Chemung Co., ..... 5
Best Sample Winter Butter—E. Merriam, Leyden, Lewis Co., ..... 5
2d do.—Mrs Wm. Newcomb, Johnsonville, Rens. Co., 3
3d do.—L. L. French, Richfield, Herkimer Co.,... Trans.
Best Three Cheeses—E. F. Carter, Evans Mills, Jefferson Co., ..... Cup valued at $15
2d do.—John Gillett, Scott, Cort. Co.,.. Cup valued at 10
3d do.—Norman Gowdy, Lowville, Lewis Co., ..... 5
4th do.—A. M. Haight, New-Lebanon, Col. Co.,... Trans.

WINTER FRUITS.

Best Twenty Varieties of Apples—R. H. Brown, Greece, Monroe Co., ..... Dip. and $4
2d do.—E. S. Hayward, Brighton, Monroe County, Downing and $2
Best Ten Varieties of Apples—G. K. Eels, Clinton, Oneida Co., ..... Dip. and $3
2d do.—D. Conradt, Brunswick, Rens. Co.,..Barry and $1
3d do.—Henry Wier, Johnsonville, Rens. Co., .... Trans.
Best Collection Winter Pears—Elisha Dorr, Albany, Small Silver Medal
Currant Wine—Elisha Dorr, Albany, Small Silver Medal
Specimen Bucks Co. Fowls—Wm. Richardson,... Trans.

Hon. A. S. UPHAM, the retiring president, then delivered an address, mainly upon the position and education of the farmer, and was followed by the newly chosen incumbent, in a few appropriate and interesting remarks. The thanks of the Society having been expressed, and copies requested for their Transactions, Hon. M. P. WILDER briefly and happily responded to a call upon him—alluding to his connection with several of the gentlemen, and especially with Gov. KING in the U. S. Ag. Society, and referring to his own efforts in past times, for the establishment of such an institution in Massachusetts, as he now congratulated our State upon possessing in the Agricultural College. Gov. KING, after several calls then took the floor, and made some eloquent remarks, bearing upon the position occupied by the State, both Agriculturally and Commercially, and calling upon its farmers to maintain their own and its standing, by keeping it as it now is, foremost among its sister states, and by handing down to their children, an inheritance even better than that received from their fathers.

Judge CHEEVER then followed—giving more in detail than had been before presented, the present condition of the College, of which, as our readers are aware, he is the presiding officer. The building is to be constructed of stone from an excellent quarry on their own premises, and every effort will be exerted on the part of the trustees to do what they do, thoroughly and prudently, to attempt no more than they can accomplish, to act within their means, and to go on just as fast and no faster than these permit.

Hon. A. B. DICKINSON followed—adverting with much effect to the services rendered to our Agriculture by our Mechanics, illustrating this by a comparison between our tools and those of the English,—denying a statement that had been made to the effect that our farmers did "not understand their business," claiming for them far more praise than superficial observers generally award, and illustrating this point by alluding to the large number of men in his own immediate locality who went there as boys with nothing but strength of arm and heart, and are now worth their tens and twenties and fifties of thousands, *made wholly and exclusively in their calling as farmers.*

The comparison instituted by Major D. between English and American implements, next elicited from Secretary JOHNSON a full and very interesting account of the prejudices against the latter existing in England at the time of the celebrated World's Fair, at which he was a delegate, and of the final triumph over them accomplished by our pitchforks, our plows, and above all, our reaping machines. Col. J. held the undivided attention of his audience for nearly three-quarters of an hour, and was frequently interrupted by laughter and applause.

### Meeting of the New Executive Committee.

Friday morning the newly chosen Board of officers held their first Executive meeting at the rooms of the Society, Mr. KELLY taking the chair in the necessary absence of Judge MCCOUN. The Fair was decided to be held at Syracuse the 5th, 6th, 7th, and 8th days of October, and the usual contracts between the Society and the local committee were perfected. The reports of experiments handed in for Premiums, were referred to the Secretary and Treasurer for examination. Other customary business of a first meeting in the year having been accomplished, the Board adjourned until the 18th of March, when the premium list will come up for consideration, and it is hoped there will be a full attendance for its revision and final preparation for the press.

## General Principles of Agriculture.

MESSRS. EDITORS — In looking over the Country Gentlemen for the past year, I find among its many able and instructive correspondents few who write from the extensive cotton growing districts of the South. As your journal is in no respect sectional in its character, and the principles of agriculture much the same in all climates and places, the cultivators of the soil may learn something from the experience and observations of each other, no matter where they till the earth or practice farm economy. With us, land is cheap and abundant, and labor both scarce and exceedingly high. These two facts operate almost irresistibly to prevent the adoption of any general system of husbandry which will save our cheap virgin soils from speedy impoverishment. If they cost from $50 to $75 per acre, the owners could not afford to render them nearly valueless by a few years' cropping; and the production and saving of manures in a large way would be indispensable to successful planting.

But since the general government has given away to soldiers and their heirs, railroad companies, new states and territories, so many million acres of its public domain, and reduced the price of rich planting and farming land in the market to a mere nominal sum, it is far cheaper to purchase the raw materials of cotton, corn and wheat by the *section*, or mile square, than to buy them or obtain them in any other way. If Congress designed to overwhelm the older states, by creating a double drain on their population, wealth, arated and depastured fields, it is not easily conceived how they could have attained that unpatriotic object more fully, or more injuriously, than has been done.

To demonstrate the soundness of my views on this important subject, I trust that neither you nor my old and highly esteemed friend JOHN JOHNSTON, will object to my showing that even his good farming has not a basis broad enough to meet all the exigencies of American agriculture. He fertilizes his underdrained farm by the liberal purchase of oil cake, corn, hay and other food for his bought sheep and cattle to eat and yield rich manure. The sale of these fattened animals pays for all they consume, beside their first cost, and something over, giving him a clear profit of the precise things required by nature to produce maximum crops of wheat on every field that he cultivates. His system is plain and simple; but suppose every farmer in the State of New-York were to follow his practice? Pray, tell me where they could *all* find the tons of oil cake or any equivalent, for the equal production of beef, mutton and manure? Could all the farmers of any State, or all in the United States, buy flax seed, cotton seed, grain, hay or manure, taken most obviously from the soil, without going abroad for the same? Apply Mr. Johnston's system to an agricultural State filled with tobacco or cotton planters, who export their staple. Who is to supply their millions of acres of old fields with an adequate quantity of either domestic or imported manure? Clearly, it will utterly fail to meet their wants and circumstances. How to meet them and the condition of those large grain farms from which so much of breadstuffs is annually taken, is the question of all agricultural questions, that Congress ought to solve, if its seventy millions dollars import duties derived indirectly, but exclusively, from the elements of fertility exported from American soil, are to be regarded as a perpetual income. In place of taking measures to foster the critical study of the Principles of tillage and husbandry in all parts of the Union, the Federal government pursues a policy with its vast public lands that will compel the impoverishment, ultimately, of the whole continent.

After 35 years' observation in the most fertile part of Western New-York, Mr. Johnson informs the public in your paper of April 2d, 1857, that

"*The truth is, the land is exhausted by over-cropping*, and it must either have rest or high manuring."

A more pregnant truth was never uttered. Having I trust satisfied the intelligent reader that his system is impracticable for the million, and more especially, by southern planters, it is easy to understand why the latter turn out so much of their badly worn tobacco and cotton lands to rest, and slowly recuperate by the benevolent efforts of nature in that behalf.

In New-York and New England, where the population is much denser than it is in the planting States, you can not well afford to rest three-fourths of your arable lands for twenty or thirty years in succession. Hence, the food of agricultural plants has become with you a matter of the highest moment. In the Patent Office Report for 1849, page 26, I remarked: "Fully to renovate the eight million acres of partially exhausted lands in the State of New-York, will cost at least an average of twelve dollars and fifty cents per acre, or an aggregate of one hundred million dollars. It is not an easy task to replace all the bone-earth, potash, sulphur, magnesia, and organized nitrogen in mould, consumed in a field which has been unwisely cultivated fifty or seventy-five years."

I am well aware that the owners and cultivators of American soil are not yet prepared to study the philosophy of agriculture, nor to instruct their representatives at Washington to pass Mr. Morrill's excellent bill, giving public land to each of the States and Territories to endow agricultural and mechanical schools. Time, however, will make them feel as well as see the folly of refusing to cultivate useful knowledge in a nation of farmers. Sound principles are indispensable to lasting prosperity; and these are rarely learned, and understood, without the aid of long and patient study of the natural sciences most intimately connected with the mineral, vegetable and animal kingdoms. Every product of the farm, garden and orchard, is an organized substance governed by fixed and unerring laws; and it requires highly cultivated common sense to grasp the true meaning of those natural laws which silently work the increase and decrease of fruitfulness in all soils. All experience goes to prove that fertility is neither equally distributed in farming lands, nor a constant quantity. In the Transactions of the New-York State Agricultural Society for 1848, there is paper on "The Philosophy of Tillage," in which I endeavored to develop the laws mainly concerned in regulating the natural productiveness of the earth. Since that time, I have devoted ten years to the careful investigation of agricultural phenomena, and had occasion to know that most men have very confused notions in reference to the several sources of fertility and causes of infertility in the land which they seek to improve. In every thing there is a fondness for the marvelous, as in the supposed transmutation of wheat into chess, and an unwillingness to apply the inductive system of reasoning to facts in agriculture and stock-husbandry, that

greatly retard substantial progress in our planting and farming industry. A searching review of our current agricultural literature would reveal a mass of contradictions, errors, and follies, anything but creditable to our every day practice, and our professional attainments. Nothing is more needed than sound criticism applied equally to our farm economy, agricultural journalism, and rural science. So long as mere pretenders impose upon the public by presuming to teach a profession which they have never learned, the professional study of agriculture will have the appearance of quackery to the masses. The Albany Cultivator and Country Gentleman, I am happy to say, have ever taken an elevated stand against the errors of popular ignorance on the one hand, and the selfish, if not fraudulent designs of sharpers, on the other. Residing over 100 miles from the office of the Southern Cultivator, I do not see as much of your paper as I desire; and if you will send me your weekly, you may regard me as a regular correspondent hereafter. D. Lee. *Athens, Ga., Jan.* 23, 1858

## Poultry Manure for Corn.

Eds. Coudtry Gent.—In your paper of April 16th, 1857, is recorded the result of an experiment with hen manure—how composted, and in what manner applied. The past year I have also tested the value of hen manure as applied to the corn crop, and with results the most astonishing; substantiating in my view the remark made in a former article, that the value of concentrated manures, applied to the young and feeble plant, of whatever kind, was not sufficiently understood by our farmers. And if this article should induce any of your readers who have been in the habit of applying all special fertilizers in a later stage of the plant's growth—whether ashes, plaster or hen manure—to try at least a few rows of corn, the manure for which shall be so applied that the young plant in its *earliest* stages of growth shall receive benefit therefrom, and notice the result of such trial—then I am confident that what I shall write will not prove a mere "waste of printer's ink."

The past season my cornfield of eleven acres was meadow sward, turned over a few days before planting, and all manured alike, with common barn-yard manure. Soil a rich gravelly loam, that for two years previous had averaged at least two tons of hay to the acre.

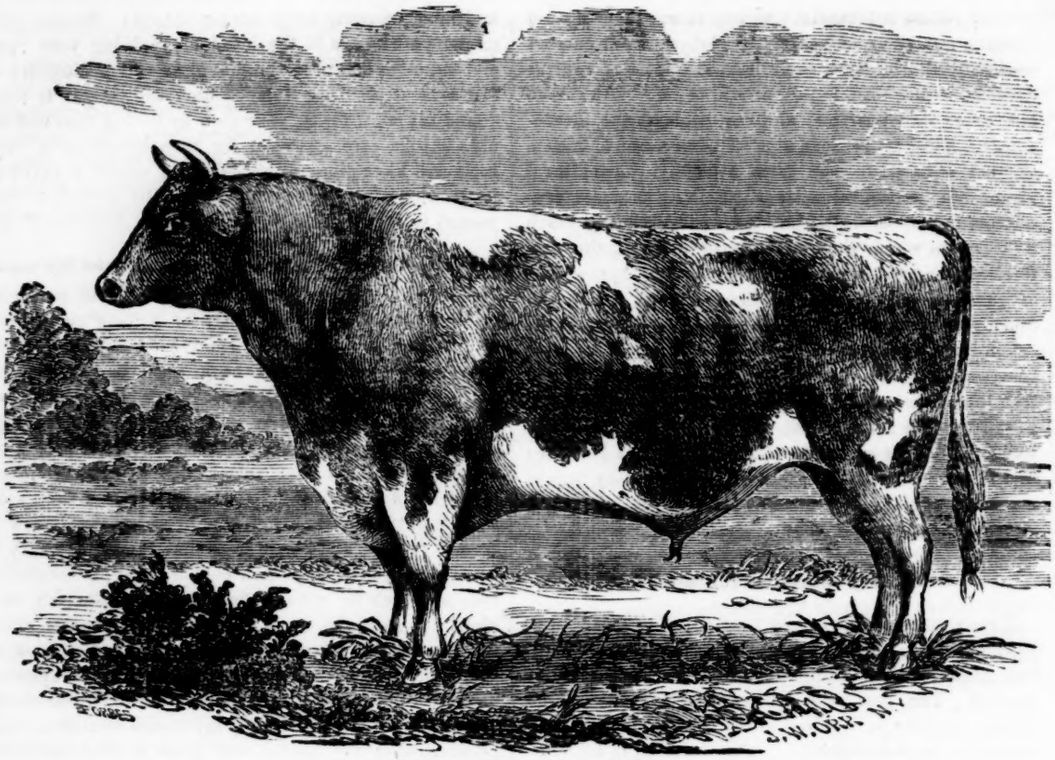
I am thus particular for the reason that I would show sufficient strength of soil to grow "some corn," without the aid of *any* foreign fertilizers; and fully equal to the average corn-fields of the State. Four rows, running north and south, through the center of the field, were planted at the same time, and under the same circumstances as the remainder of the field, minus the application to each hill before planting, of a compost of hen manure, plaster and ashes. From these four rows I harvested just 6½ bushels of sound corn; or a trifle over 1½ bushels to the row. From four rows immediately adjoining, I husked just 12½ bushels of sound corn, or a trifle over 3 bushels to the row—the "hog corn" in both instances being nearly equal. I am aware that this proves a difference hardly credible; and yet the facts warrant me in saying that I nearly doubled my yield of corn by applying merely a table-spoonful of the above compost to each hill; for so trifling expense and labor, reaping large reward indeed! Brother farmers! ye who are in the habit of applying your special manures either at the first or second hoeing, try a few rows at planting time—a hurrying time it is true—and my word for it, your corn by hoeing time will be able to take care of itself; for then hundreds of tiny roots will have pierced the decaying mould, supplying itself with whatever is requisite for the growth of the parent stalk. J. E. S. *Maple Grove, Del. Co., N. Y.*

## How to Grow Early Cucumbers and Melons.

Messrs. Editors—You have published in your excellent journal several methods for forcing cucumbers and melons for early use. I have one which I have proved by experience to be a good one, and with your permission I will give it for the benefit of your readers. My first preparation for planting, is the making of a good hot-bed, one that will give considerable heat and retain it. I usually plant about the first of March or a little later. I then procure empty oyster kegs, saw them in two, bore a hole in the center of each head for drainage, which I cover with pieces of broken pots or other porous material, and then fill with a fine and rich compost, and plant my seeds in them. I bury my kegs to their rims in the dirt of my hot-bed, when it has become sufficiently warm, and the plants make their appearance in a few days. I am then careful to water as often as is necessrry, and keep my frame at such a temperature that my plants will grow stocky and look healthy, not spindling. When my ground is right for transplanting, I make hills two feet in diameter and the same in depth, rich and mellow, and then lift my boxes from the bed, *cut their hoops*, when the staves will readily fall apart, leaving a clear ball of earth and roots, and the latter whole and undisturbed, which I bury in my hills; the plants will grow without check if the work is done with care, and early fruit is the reward. I use the gallon and larger sizes of kegs, as they allow more room for the roots to grow in, and before transplanting I "harden my plants off," and afterwards use boxes around them with a pane of glass in the top. I claim for this method, over that of planting upon inverted turf, one great advantage, which is this: The roots of my plants are never broken or disturbed, but grow without check; whereas, upon turf the contrary is the case, even with the utmost care. The cost is a trifle, as any one can see, for the kegs can often be had for the asking, as they are usually broken to pieces and burnt at the hotels, &c. I have grown cucumbers and melons by this method with perfect success, and as the plants get the start of the bugs, I am never troubled by them. For market gardeners, of course Mr. Howatt's way is the best, but for amateur gardeners, this will be found as good as any where plants are to be grown for family use. J. H. H *Clark's Mills, Oneida Co., N. Y.*

## A Recipe for Making Brown Bread.

I will give you my recipe for making brown bread, which I have adopted of late and find it very good. Take two quarts of corn meal, two do. of shorts, one tablespoonful of salt, one teacup of molasses. Stew a squash or a good pumpkin, in water sufficient to wet this mass; pour it on boiling hot. When cool enough, add a pint of yeast and two quarts of wheat flour; this will make four loaves. When light, bake three hours. Lady Reader. *Pleasant Ridge, Ill.*



**Jersey Bull Commodore.**

Calved 1852—imported August, 1854, from the Island of Jersey, by J. A. Taintor, for J. HOWARD MCHENRY, Esq., Pikesville, Baltimore Co., Md.

| | | | | | | |
|---|---|---|---|---|---|---|
| Second Premium Bull, under two years, | Island of Jersey, | | | | | 1854 |
| First Premium Imported Bull, under three years, | Maryland State Show, | | | | | 1854 |
| " | " | over | " | " | " | 1855 |
| " | " | " | " | " | " | 1856 |
| " | " | " | " | U. S. Ag. Soc. Show, | Philadelphia, | 1856 |
| In the Premium Jersey Herd, | " | " | | " | " | 1856 |

## Masson's Oil for Wounds, &c.

MESSRS. TUCKER & SON—I have long been in possession of a recipe for an oil for the cure of corked hoofs and wounds on horses.

Take 2 ounces of rock salt,
2 ounces of copperas,
2 ounces of white vitriol,
8 ounces of sale molasses.
½ pint of linseed oil,
1 pint of chamber lye.

Pulverise and boil the above together fifteen minutes; then add 4 ounces spirits of turpentine and 1 ounce of oil of vitriol, and bottle it up, and when cold it is fit for use. Shake the bottle before using it. Bathe the wound once or twice a day, and dry it in with a hot shovel.

I have kept and used this liniment, which is here known as "Masson's Oil," for the past ten years to a good account. A. D. BROWN. *Laurens*

## Lice on Calves.

The best resort that I have ever found to rid my calves of lice, is very simple, easy and only this: take a few dry ashes from the stove; rub them well into the hair of the animals, and all those troublesome little creatures will soon become harmless and disappear. Calves, or any other animals to which ashes are applied, should be kept dry for a few days. J B.

## Cure for the Stretches in Sheep.

Cut their throats, and take off their pelts. This is the only remedy I know of, although there are many prescriptions. I do not believe the real stretches can be cured. I have one sick now, and I must go and butcher it. I have tried tar, tobacco, and oil, (but not all at once,) but no cure. The belly-ache probably can be cured. S. CONE. *Berkshire Co., Mass.*

For the benefit of your subscribers, I would say that Ebenezer Johnson of this place, cured a valuable New Oxfordshire ewe of the "stretches," by administering the remedy published in the Cultivator of 1856, page 143. He had lost several sheep with this disease, but never knew of one being cured before. Certainly "The Cultivator" paid a *good interest* on its cost in the above case, and I am of the opinion that it would pay he most of our farmers well to subscribe for it. S. W. JOHNSON. *Thurman, N. Y.*

## To Remove Fresh Ink Spots.

A farmer's "gude wife" assures me—in addition to which I have seen it successfully tried—that fresh ink spots may be removed by the following method, namely: Covering the part stained with, or submerging it under, a little *warm milk*—the newer the better—for from five to ten minutes; then rinse and wash with soft water. It is a very cheap and simple process, and efficacious withal. C.

## Schooley's Patent Preservatory.

In our recent notice of the proceedings of the Fruit Grower's Society of Western New-York, a brief notice was given of this ingenious and admirable contrivance, and of its power of preserving soft fruits, milk, fresh meats, &c., for a long time. Believing that a more detailed account would be interesting to our readers, J. L. ALBERGER of Buffalo, who has made a full trial, has at our request furnished us the following particulars in relation to it:—

The main features of the preservatory are the production of continual currents of cold dry air, without mechanical aid, by the use of ice. It is well known that to preserve meat or fruit, a certain degree of cold is desired. Nor is this *alone* requisite; the air must be *dry* and *pure*, or the moisture would destroy all. We construct adjoining each other two rooms, separated by a partition open a few inches at top and bottom. These rooms are insulated against the ranging temperature of the outside air by packings several inches thick on all sides of nonconducting material, such as charcoal, saw-dust, tan-bark, or any dry vegetable matter, changing the size and peculiar position, shape, &c., to any locality or purpose desired. As an instance of the range of size, we have here one house 50 by 100 feet, and eight others, down to the small chest on the same plan, 3 by 6 feet. The operation is thus: The ice-room containing ice,—the air in contact with it becomes suddenly cooled; its moisture is condensed; it becomes heavier; and flows under the partition,—pure dry air at a temperature a little above that of the ice itself, into the preserving room among the articles, forcing the lighter and warmer air to the top of the room, whence it flows to the ice-room, and is drawn down among the ice, where it in turn deposits its moisture, and flows out again, thus producing a self-contained and actuated current of cold dry air. When, after a time, this air becomes impregnated with the odor of the articles in store, ventilators are provided for expelling it immediately, and restoring fresh air.

As instances of preservation, I will state that in June last our firm slaughtered 1,600 heavy fat hogs, and every month after that the same number until fall, making a total of 2,000,000 lbs., and cured it with perfect success—as good as in mid-winter. Peaches, Bartlet pears, grapes, green corn, &c., exhibited at a house on the State Fair grounds in this city last fall, which I built nine days before the fair, kept perfectly fresh 21 days; after removing the house, I kept them in a chest on this plan, 24 days longer, in eatable condition.

I have kept milk 20 days in weather that would sour it outside in 24 hours, and have raised one-third to one-half more cream than can de done by any other natural method. The cream separates in from three to five hours, or as soon as the milk cools to the proper temperature. I think that a dairyman would make one-third more butter every day in the year with this preservatory. During winter the milk will not freeze in it, [on account of the non-conducting walls,] which I understand is a decided advantage, as when milk freezes, the watery parts come to the top as well as the cream. From my own experience, I have no hesitation in saying that meats, fruits of any and all kinds, vegetables, milk, and all the farm products, will keep almost indefinite lengths of time. Grapes, I think, would keep nine months in great perfection. Many other articles, and facts I might name, but do not desire to intrude too much on your columns. Concerning the cost of the structure, it can be, as any other house, expensive or cheap, and varies with the locality. The consumption of ice is quite small. A small house will hold ice enough packed in winter to last the whole year. J. L. ALBERGER.

In addition to the above statement, LEWIS F. ALLEN, Esq., of Black Rock, N. Y., writes us as follows:—"I have seen the preservatory several times during the past season, and examined the articles stored in it, and confirm all that Mr. Alberger states in relation to them. I believe the adoption of such a preservatory by the dairymen, fruit-growers, hotel-keepers,—in fact by all who have perishable material, which they wish long preserved, will add greatly to their interests and profit by doing so.

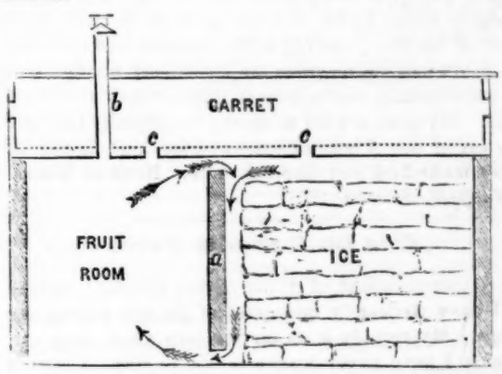
"I saw milk two weeks old in one of these structures, which was as sweet as on the day it was deposited there, and covered by a thick crust of the richest cream. For butter dairies, the preservatory would be of incalculable service.

"I have not the slighest pecuniary interest in this invention, and look upon it only as I do upon all those discoveries which tend to relieve labor of its burthens, and work for the great good of the human family.

"I intend to erect one on my own farm the coming season, believing it to be much more effectual in its objects than the common, yet very well constructed ice-house which I have had in use for many years."

In addition to this testimony, we may add that after an examination by a committee, a gold medal was awarded by the Executive Committee of the New-York State Agricultural Society, a few weeks since, to this invention.

In order to assist our readers in comprehending the principle of its operation, we annex the following section of the structure, drawn from recollection of the model exhibited at the Fruit-Growers' meeting at Rochester.




The arrows show the currents of air. The partition *a*, separates the ice vault from the fruit-room. The air in contact with the ice, of course descends in consequence of its density from coldness. It must, therefore, flow into the fruit-room through the opening or slit under the partition *a*. The warmer air in the fruit room must inevitably flow back through the upper opening over the partition *a*. Thus a constant stream of cold air pours into the fruit-room; and by the use of registers to open or close the openings, the precise

degree of temperature may be controlled with the greatest accuracy. The circulation of air is kept up precisely in the same way that hot water currents are maintained, in warming green-houses and other apartments.

When the air in the fruit-room becomes impure, the ventilator *b*, is opened a few minutes for its escape, and fresh air comes down from the garret immediately above, through the orifices *c c*, which are also opened only at the same time. Fresh air is constantly admitted into the garret at the ends.

The walls of the structure are made double and filled with saw-dust, as in a common ice-house above ground.

### Profits of Butter Making.

MESSRS. L. TUCKER & SON—In the Jan. number of the Cultivator, I notice the article of J. T. CURTIS of Chenango Co., on the profits of butter making, &c. Please give mine from Chautauque County. From 4 cows, 5, 6, 7, and 8 years old, one native, the other three half native and half Hereford, one of my daughter has made, from 14th April to first January inst,

| | |
|---|---|
| 825 lbs. butter—470 lbs. sold in N. Y., at 24c. | $112.80 |
| 365 lbs. consumed in family, at 24c., | 85.20 |
| 3 pigs fatted on milk, say 600 lbs., at 6c., | 36.00 |
| 2 heifer calves, worth $10 each, | 20.00 |
| 1 calf 4 weeks old, vealed, worth | 3.00 |
| 1 calf sold butcher, at four weeks, | 3.00 |
| | $260.00 |
| Cost of keeping cows one month at hay in the spring, and 2 months up to 1st January, 12 weeks each, at 75c., $36.00 | |
| 22 weeks at grass, each, 3s, 33.00 | |
| Estimated charges on butter sent to N. Y. whole amount at 2c. ℔ lb. 17.50 | |
| | 86.50 |
| Saying nothing about labor, proceeds are, | $173.50 |

Now about the cows. It is well that diversity of opinions and tastes exist in regard to the different breeds of stock. Mine is decidedly favorable to Herefords, especially as milkers; and for fattening, considering their compact build, aptness to take on fat, quiet dispositions, they are superior. One of the number in my list above, 5 years old, calved about the middle of April, and grass being abundant during summer, she became rather fleshy, and failing to be in calf, dried her off 1st Nov., and fed with pumpkins and soft corn—would now not disgrace the finest beef market, and is considered by cattle buyers, dull as times are, worth $50. My cows are fed no meal; occasionally they get an ear or two of corn apiece—no pumpkins in fall, as they make flesh and diminish milk. NORMAN KIBBE. *Westfield, Jan.* 15, 1858.

### Cure for Thumps in Swine.

A correspondent of "The Cotton Planter," says—"I have frequently had cases of thumps among my hogs. My remedy is to tar the corn which they eat, which I have never known to fail to effect a cure if taken in time. My manner of preparing the food is simply to have a bucket of tar at my feeding ground, tarring each ear of corn as I throw it to them. If this plan is commenced soon after Christmas, and continued one or two months, my experience is, that few if any hogs would have thumps."

BARLEY.—The barley crop in the county of Haddington, Scotland, the last year averaged 38 bushels and 1½ pecks per acre.

### Cure for the Hog Cholera.

MESSRS. EDITORS—Can any of your subscribers inform me what will cure a disease among hogs called cholera? It is a disease which, so far as I can learn, cannot be cured, as it attacks in different forms. Some are taken with a diarrhea, and die in a few days; some vomit, and others seem to be taken with a cough, finally to a wheeze; their ears and head turn a red purple, swell some, and die If any of you can tell a cure or preventive, you will greatly oblige a subscriber to your Cultivator. W. E. N. *Near Maysville, Ky.*

This disease continues to rage with great severity in various parts of the country. A subscriber in Cumberland county, Pa., writes us that it has swept off thousands of hogs in that county, many farmers losing 40 to 50, and distillers from 100 to 300. No remedy tried did any good.

The U. S. Ag. Society, at its meeting in 1857, appointed a committee to report on this disease, of which Dr. HIGGINS of Maryland was chairman, who made his report at the late meeting in Washington. It states that the disease is evidently a species of pneumonia, and the cure, as discovered by Dr. Higgins, after experimenting on hundreds of cases, is to take equal portions of carbonate of soda and carbonate of barilla, mix together, rub them in a mortar, and give a dose of 10 grains, about a table-spoonful, three times a day. This is said to have been entirely successful.

### Manure Composts.

MESSRS. EDITORS—I have a great quantity of soil, containing from ten to fifteen per cent of vegetable matter, mostly undecomposed, and black in color. Please state in THE CULTIVATOR, what proportion of this soil I shall mix with lime, leached ashes, bone dust, &c., to make an efficient manure for corn; how long the mixture should stand, before use, and how much should be applied to the acre, and in what manner? L. B. Y. *Queens Co., N. Y.*

We can only give a very general answer, in the absence of information on the quantity of clay in the soil. A compost for corn may be made of about one to three parts lime, one part leached ashes, and forty or fifty parts of soil and manure, in about equal proportions, or else with the soil twice or thrice the quantity of the manure. Twenty tons might be applied per acre. A few hundred pounds of bone dust would be a good addition to the above quantity of compost. The mixture should stand, if practicable, several months; although a few weeks at mid-summer will do, and be equal to more than three times that period in winter.

### A Cheap and Good Pudding.

MESSRS. L. TUCKER & SON—Permit me once more to give you a recipe for making a good pudding. It is at once economical, healthful, nutritious, and delicious; it may be eaten warm or cold. When cold, it is a capital substitute for *Blanc mange*.

Into a nappy that will contain about two quarts, place apples, pared and cut coarsely, until the dish is nearly full; sprinkle on this six tablespoonfuls of sago; then pour into the dish as much hot water as will cover the apples and sago. Let it bake about two hours. If the upper pieces of apples become too brown, push them down, and others will take their places.

This pudding should be eaten in deep plates or saucers, with cream or milk and sugar. S. R. *Springfield, Mass.*

### Coal Furnaces for Warming Houses.

Will you inform me which are the most approved coal furnaces for warming apartments, and the amount of coal they consume? W. D.

There are several approved furnaces, but we can only speak from experience in favor of Richardson & Boynton's, of New-York. The part which the fire reaches being of cast-iron, they are quite durable. The one we have experimented upon the present winter, has a fire-chamber about one foot in diameter, and ten inches high; the whole furnace is enclosed in a case of galvanized iron, forming a cylinder two feet in diameter, and five feet high. During the present mild winter it has consumed only 21 hundred pounds of Scranton coal per month, or scarcely over a ton, and it has warmed three apartments day and night. By closing the draft, it easily keeps fire twelve hours, and might, probably, by very slow combustion, retain fire for twenty-four hours. In severe winters, it would probably consume a ton and a half of coal per month, or even more. The amount would be modified by the character of the house, and the windinesss of the locality. Our experiment was performed in a well built wooden house, with the walls filled in with brick, and the situation quite exposed. The cost of the furnace was $35; register $12; and setting up and pipe added enough to make it altogether about $55. It is not separated from the rest of the cellar in which it is placed, but as this was formerly too cold, the warmth imparted is just sufficient to give the desired temperature. In most instances, however, it would be best to place it in a separate apartment.

We know of no distinct experiments performed with this furnace of other sizes, to determine the amount of coal required.

As feeding the fire of such a furnace occurs many times a day, it should be done in the easiest manner. We find the best way is to take a common iron scoop or grain shovel, and have the sides or edges bent upwards a few inches, by a common blacksmith, so that it may just enter the door to the fire chamber, and also the door below, to clean out the ash-pit. A similar shovel thickly perforated with holes, forms a very convenient ash-sifter, admitting of use in the ash-pit itself.

### Draining Swamp Land.

Messrs. Editors—I have an 8 acre lot of low land, which I have bogged and cut an open ditch around the outside, and also once in 6 rods through it lengthwise. The upper surface is black muck without any grit or sand in it, and very light when dry, 8 inches thick; then clear peat 6 or 8 inches thick, consisting of fibrous roots, &c., holding water like a sponge; then 8 inches of peat and a light slate colored sand mixed together, underlaid by what seems to be a hard-pan, but when loosened up becomes a quicksand if mixed with water. Now what I want to know is, what to do with the land in its present state. It has been plowed twice about 6 inches deep, and I have taken off a light crop of buckwheat, oats and corn, with no manure. Shall I plow up the peat below the black muck, and mix with the muck; or is it best to plow it shallow, and lay down to grass? What is the best manure to buy for such land, and can I cultivate it so as to make it pay? N. E. Chaffee. *Ellington, Ct.*

The first thing to do is to underdrain it deeply and thoroughly—we question if drains 6 rods apart will accomplish the desired result; our correspondent may determine this point by observation. We can perceive no advantage in plowing up the "peat" into the muck, both being the same thing essentially. If the sand or hard-pan could be thrown up to the surface, it would no doubt prove beneficial—could not this be done while performing a more thorough underdrainage? The experiment may be easily performed on a small scale. No manure will be of use while the ground remains soaked with water—when rendered dry enough, we would recommend a moderate dressing of lime and ashes, if easy to be obtained, (say 20 to 50 bushels per acre at a time,) and yard manure. By this time, such land would probably produce fine crops of timothy or red-top grass, broom corn, or Indian corn, if the latter is an early sort, so as to escape the frosts to which muck lands are so liable.

### Cultivating Plants while the Dew is on.

Messrs. Editors—At least fifteen years ago, I noticed a plot of cabbages, of which the large firm heads I could not account for from anything apparent in the soil. On asking the owner how he made from such a soil so fine and uniform a crop, I found his only secret was that "he hoed them while the dew was on." He thought that in this way he *watered* them, but of course the good resulted more from the ammonia than the moisture of the dew.

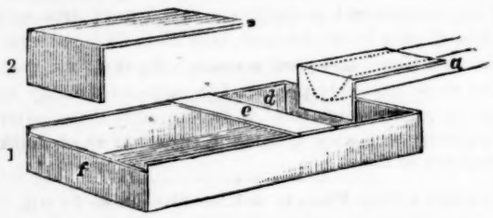
I adopted the practice the year following, and with the result was so well satisfied, that I have since continued and recommended it to others. In my "Gardening for the South," published two years since, you will find (page 163) "they (the cabbage tribe,) especially like to have the soil about them, thoroughly worked *while the dew is on them.* There will be a very great difference in the growth of two plots of cabbages, treated in other respects alike, one of which shall be hoed at sunrise and the other at midday; the growth of the former will surprisingly exceed that of the latter."

A story in point some time since went the rounds of the agricultural press, of which the substance follows: A small plot of ground was divided equally between the hired lad of a farmer and his son, the proceeds of its culture to be their own. They planted it with corn, and a bet was made by them as to which should make the best crop. At harvest the son came out some quarts behind. He could not understand the reason, as he had hoed his twice a week until laid by, while he had not seen the hired lad cultivate his plot at all, and yet the latter had gained the wager. It turned out the winner's crop had been hoed quite as frequently, but before his rival was up in the morning. *Providence, it seems, follows the hoe of the early riser with a special and increased reward.*

But there are exceptions. Cultivating while the dew is on, manifestly benefits such gross feeders as cabbage and corn, but there are plants very impatient of being disturbed while wet. The common garden snap and running beans are examples; and if worked while wet, even with dew, the pores of the leaves seem to become stopped, and the whole plant is apt to rust and become greatly injured. Whether the Lima beans and other legumes are as impatient of being hoed in the dew, I have not ascertained. Experiments should, however, be tried the coming season on all hoed crops. Wm. N. White. *Athens, Ga.*

### Mattison's Apple-Seed Washer.

We have often received inquiries for the best mode of washing apple seed from pomace, to sow for nursery trees. One of the best modes we have met with, is that adopted by JAMES M. MATTISON of Jacksonville, Tompkins county, N. Y., which he has recently described to us. He assures us that by this method, *two men will wash from half a bushel to a bushel of seed in an hour*, without inconvenience, or without becoming wet in the operation.




Make a box 5 feet wide, 8 or 9 feet long, and 10 inches deep; leave the lower end *f*, one inch lower than the sides, for the water to flow over. Place this box in the bed of a brook or stream, on crossbars or scantling, with a dam above to collect the water into a trough, carrying the water into the box, and projecting six inches over it. This trough should be made of boards 12 inches wide, nailed together, and the stream should be large enough to nearly fill it when flowing gently. To prevent the water from dashing into the box too furiously, two boards are first nailed together as shown in Fig 2, one board being 18 inches by 2 feet, and the other 18 inches by 1 foot. The longer board is placed on the top of the spout, and the shorter at right angles across the lower end of the spout. This serves to throw the water perpendicularly downwards into the box, and at the same time serves to spread it out into a thin sheet. By moving this board up or down the spout, the quantity of water pouring into the box may be easily controlled.

One man stands on the board *e* which extends across the box; and the other carries and deposits the pomace (well pounded to pieces,) into the box at *d*, one or two bushels at a time. The man on the box then stirs the pomace rapidly with a four-tined fork, and throws out the straws. The pomace floats over the lower end (which is an inch lower than the sides,) and the seeds fall to the bottom. A few back strokes from the lower end of the box assist in the separation of the remaining pomace. In washing a "cheese" that contains a bushel of seed, it is usual to wash it two or three times, by using a scoop-shovel. Afterwards, the last cleaning process is given to it by placing the whole in a box, and then scratching a four-tined fork through it a few times. A little experience will enable any one to judge accurately of the proper quantity of water to turn on, so as to make rapid work, and not carry the seed over the box.

The pomace, *fresh* from the cheese, should be drawn and placed on a board-platform beside the box, and then plenty of water thrown upon it, until it is thoroughly soaked. This will render it easily beaten to pieces with a hoe. The pomace should never remain in the cheese over twenty-four hours, as it soon ferments and the seed is spoiled.

Plants of the Dielytra spectabilis raised from seeds, are much more prolific of flowers than from cuttings.

### Flat Stone for Drains.

MESSRS. EDITORS—Is it possible to successfully underdrain exclusively with flat stone, of all shapes and thickness, varying from the size of a hand to one foot square, one-half to three inches thick; and what is the best and cheapest manner of using in the construction? A SUBSCRIBER. *Sinclearsville, Chautauque Co., N. Y.*

The kind of stone mentioned may be used to great advantage in underdraining, by a proper selection of sizes. The slaty rock belonging to the Chemung group, which we suppose to be the kind alluded to, answers an excellent purpose.

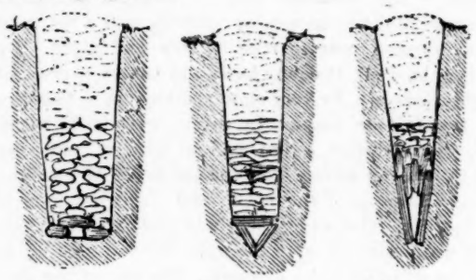


Fig. 1. Fig. 2. Fig. 3.

The most common way, and usually the best, for filling stone drains where the stone are nearly *round*, as shown in fig. 1, made by just laying a row of small stones on each side of the bottom, leaving an open channel between them about three inches wide, and then covering this channel with flat stones, and filling the ditch with small ones promiscuously thrown in, to within about 15 or 18 inches of the surface, so as to be below the reach of the plow—and the remainder with earth. It is hardly necessary to remark that the upper surface of the stone must be either covered with coarse gravel or small flat stone, and then with straw or inverted sods, to exclude the earth from the stones; and if the soil is nearly free from clay, more care in this respect will be needful,—and perhaps a covering of hard-wood slabs will be necessary to keep the earth to its place. If the bottom of the drain inclines to quick-sand, a layer of flat stones must be first laid on the bottom. We mention this common mode of constructing stone drains, in order to show the superiority of the flat stones spoken of by our correspondent.

For the chief objection to the mode just described, is the necessity of cutting a ditch nearly a foot wide at the bottom, to allow laying the channel. The flat stones, on the contrary, obviate the labor of cutting a wide ditch; the channel being constructed by placing three flat stones together, as shown in fig. 2. The bottom of the ditch is cut with a pointed spade, so as to have an angular trough; flat stones are then selected, all of the same width, and fitted into and meeting each other at the bottom, and then covered by a third flat stone reaching across them. The ditch above this is partly filled with irregular fragments of stone, and covered as already described.

A still better way, where the earth is hard and the quantity of water not large, is shown in fig. 3. The ditch is cut with the narrowest kind of spade—a mode familiar to English ditchers, and which they execute with great expedition. Flat stones, without regard to their exact width, are placed against the sides, open at the top. Into this opening, one or more thicker flat

stones are thrust, as represented in the cut, and the drain then filled as before mentioned. The advantage of this mode is in obviating the necessity of selecting the stone, as almost any width will answer.

The two last modes, if well made, will last as long as tile-drains; as the earth cannot fall into them from the sides, nor rise from the bottom, even if of a quick-sand nature; and in the last described, the stones being mostly vertical, admit the free descent of the water from above.

## Proportional Average of Crops in Scotland.

It may gratify a reasonable curiosity in some of our readers, to be informed in regard to the proportion which the various field crops raised in Scotland bear to one another, or, in other words, what proportion of every 100 acres in tillage is occupied by each of the crops commonly cultivated. This information may not, indeed, be of any direct *utility*, but cannot fail, we think, to be highly *interesting*, especially to those who have the means of comparing the facts with similar statistics in their own county or State. The information of this description which follows, is derived from the tables of Scottish Agricultural Statistics, which have been recently published. The proportion varies in different counties, but taking the whole country together, the proportion of the different crops in every 100 acres is as follows:—

| | 1857. | 1856. | 1855. | 1854. |
|---|---|---|---|---|
| Wheat, | 6.274 | 7.428 | 5.419 | 4.765 |
| Barley, | 5.578 | 4.675 | 5.271 | 5.879 |
| Oats, | 26.391 | 25.912 | 26.449 | 26.430 |
| Rye and Bere, | .776 | .564 | .594 | .621 |
| Flax, | .043 | .077 | .098 | .189 |
| Vetches, Turnip Seed, &c., | .607 | .586 | .517 | .421 |
| Beans and Peas, | 1.206 | 1 277 | 1 212 | 1.243 |
| Turnips, | 13.403 | 12 979 | 12.731 | 12.292 |
| Potatoes, | 3.931 | 4.213 | 4.163 | 4.052 |
| Mangold, | .079 | .100 | .064 | .055 |
| Carrots, Cabbage and Rape, | .144 | .125 | .068 | .074 |
| Summer Fallow, | .523 | .436 | .637 | .740 |
| Grass and Hay under rotation, | 41.045 | 41.628 | 42.777 | 42.259 |
| | 100. | 100. | 100. | 100. |

It will be seen at a glance at the above table, that oats are cultivated to a much greater extent than any other grain; and that the large proportion of the soil devoted to grass and turnips, besides the permanent pastures which are not included in the above, indicates very manifestly that the feeding of stock for dairy and other purposes, must be one of the principal branches of agricultural industry in that country.

The following additional items in regard to the crops of Scotland during the past year, may be interesting to several readers.

Of wheat, the whole amount raised was 6,154,986 bushels; and the average produce about 28 bushels per acre.

Of barley, the whole amount raised was 6,494,534 bushels; and the average produce about 32 bushels per acre.

Of oats, the whole amount raised was 32,750,763 bushels; and the average produce about 33 bushels per acre.

Of beans and peas, the whole amount raised was 1,037,760 bushels; and the average produce about 22 bushels per acre.

Of turnips, the whole amount raised was 6,690,109 tons; and the average produce was about 14 tons per acre.

Of potatoes, the whole amount raised was 430,468 tons; and the average produce about 2½ tons,—ranging, however, in different counties, from 1 ton 8 cwt. to 5 tons 11½ cwt. per acre.

These averages, it will be observed, are considerably higher than any averages which have as yet been reached, according to Census reports, in this country. The larger crops of wheat, &c., of which Scotland may boast over this country, are unquestionably owing principally to a higher and more careful cultivation. An advance in our mode of cultivation, would give us also an advance or increase in our crops. Probably neither country has yet come very near to the end of all perfection.

## Seed Potatoes.

We have invariably ignored the practice of cutting potatoes to plant, supposing that nature put them in her favorite form for reproduction, and to nourish the young plant; and that by cutting them we opened the vessels for the evaporation of nutritive qualities, and lessened the means of nourishment which young plants draw from the seed.

The experience of the last season has brought us results in this matter, which, if continued success attends it, will prove of some importance.

Early in May last we turned over a piece of sod, and towards the close of the month planted it with whole potatoes. When this was planted, having a few bushels left, we plowed another piece adjoining the one already planted; this was done in June. The seed potatoes for this piece were cut in such small pieces that less than one-half the quantity was used than in the former case. The same variety of potatoes were planted on each piece, and the same tillage given. No manure was used except a table-spoonful of plaster in each hill.

When the potatoes were dug, late in October, full one-third of those on the ground where the seed was planted whole, were made worthless by the rot. Where they were cut for planting, the potatoes were of good size with scarcely any appearance of rot.

Such are the ways of management and the results; and there we leave the matter, for if we would we cannot tell whether the same course will lead to the same end in a second trial. Atmospheric and other causes which we cannot control, might change the whole result. One thing, however, if cut potatoes are as good for seed, vast quantities that would otherwise be planted, may be saved for other purposes each year. A careful following out of the experiment is the only true way to reach facts available in practice. W. Bacon. *Richmond, Mass.*

## Wash to Prevent Rabbits Girdling Fruit Trees.

I have used the following with complete success in a situation where rabbits are numerous, as a wash that they do not appear to relish, and by which the trees are not at all injured: Make a solution of, say half a pound of tobacco to three gallons of water. Mix with clay, a little lime, a little fresh cow dung, and an ounce or two of glue or paste. Thicken to the consistency of thick white-wash, and put on with a brush. I had about twenty trees much injured; but they have recovered, and never been touched by rabbits since this mixture has been annually applied in the fall and again in the winter. J. W. C.

## Inquiries and Answers.

MUCK FOR MEADOWS.—I write for information in regard to applying pond muck to old meadows. If you, or any of your subscribers, will be kind enough to give me some advice in regard to it through the Country Gentleman I would be obliged. T. F. Y. *Andover, N. J.* [Apply the pond mud or muck late in autumn, or in winter, as a top-dressing, and it will probably increase the growth of the grass, more or less, according to the wants of the land and the nature of the muck. An inch will be a proper depth—less will answer, and more may be applied, if it is of a light or porous nature.]

STRAW-CUTTERS.—Are there any straw-cutters which will cut one-fourth to three-eighths of an inch long? Those in this vicinity, with rollers, cut about three-fourths long. Do you recommend cutting stalks before feeding? N. D. R. *Wisconsin.* [All the straw-cutters which are made with knives set on a cylinder or roller, and cutting on another roller of dried hide, work very easily, but cut too long. There are many cutters with knives set so as to cut as short as is desired, but we have never seen any that suited us exactly, although several of them are quite good. It will not *pay* to run these by hand—they must be driven by horses. A friend cuts all his stalks for a large herd of cattle, by attaching the cutter to his four-horse power, used for his thrashing machine; it cuts with great rapidity, as fine as chaff, and in a short time a week's supply may be thus prepared. The cattle *eat all* the stalks, and it is a great saving.]

GRASS SEED.—In reading the notes on Major DICKINSON'S farming in Steuben County, in your last year's volume, I notice that his meadows were seeded with Timothy, Red-top, Kentucky Blue grass, and White clover. I wish to seed a few acres in the spring in such manner, and I don't know where to get seed except the timothy, nor how much of each per acre should be used, nor the cost thereof. If you can give me the desired information, you will very much oblige J T. R. *Lenoxville, Susq. Co., Pa.* [The seed can be procured at the seed stores in the principal cities. Will Major Dickinson inform our correspondent as to the amount of each kind required per acre?]

CUTTING RAILS.—What timber would you reject in cutting rails, and what is the best length to cut them? N. D. R. *Wisconsin.* [We would reject such as has been found to split badly or decay soon—or which is more valuable for other purposes. Not being very familiar with Wisconsin woods, we cannot advise particularly. If cut and split from mid-summer to mid-autumn, rail timber will last much longer, sometimes twice as long, as when cut in winter or towards spring. Twelve feet is a convenient length for the rails of a common worm fence ]

MACHINE FOR CUTTING CORN STALKS.—I am requested in the Country Gentleman of 14th, to give some information respecting my cutting machine. It was made by SINCLAIR of Baltimore, Md.—was purchased in New-York some ten years ago, but from whom I cannot now recollect—cost, I think, thirty dollars—is driven by horse power—will cut, with a light horse, on a common railway power, enough for one feed for 35 head of cattle in one hour. There are but two knives, thirteen inches long, three inches wide, fastened at the ends to iron rims or heads, about seven inches in diameter, and bent in such a manner, that in revolving, one or the other is constantly in contact with the stalks, cutting them diagonally in inch pieces. J. T. N.

ARTESIAN WELLS.—In answer to an inquiry on this subject, I will say, had D. C. M. described his neighbor's situation, a more satisfactory answer could be given. All I can say is, dig a common well in any place where the surface of the water will be higher than the part where he wishes to carry it. If the well is not more than 34 feet deep, dig a trench two or three feet deep, from the last named place to the well; lay a pipe in it; putting one end to the bottom of the well. Start the water by means of a common suction pump at the other, which must be the lower end. Regulate the discharge according to the supply by means of a faucet, for if the supply is exhausted the pipe will fill with air, and the pump be again required.

If more than the above named depth, then lay the pipe so that no part will be more than that distance above the water. (Here I might remark that lasting water can generally be found by carefully selecting a place, by digging less than 25 feet)

If he concludes to make trial, he will do well to consult the principles of the siphon, which will make the whole appear plain. B. T. C. *Carmel, Putnam Co.*

DRAINING.—Please inform me as to the best work on Draining, and the price. J. P. [Munn's Practical Land Drainer—price 50 cents—by mail, post-paid, 60 cents.]

BONE MILLS.—Are there any bone mills in operation that grind bones as fine as meal or flour, and where can they be seen? N. E. C. [One of the best, (if not the very best) bone mills in this country, can be seen at Mr. COULSON'S establishment in this city. After the bones are ground, they are sifted and assorted into different sizes, some being as fine as meal ]

ANGERS QUINCE STOCKS, STRAWBERRY PLANTS, &c.—I wish to inquire where, and at what price I can obtain a small quantity of Angers quince stocks. I wish to get stocks which, if set out next spring, will be of suitable size for budding next August. Will stocks taken from the stools last fall, answer to bud next season?

I also wish to inquire if strawberry plants may be safely sent by mail, and what would the postage be upon fifty plants? How ought they to be done up in order to go safely?

Can you inform me where I can obtain scions of the Madison and Schuyler's Gage plums? AN OLD SUBSCRIBER. *Worcester.* [Angers quince stocks are now mostly raised from cuttings in this country. Good stocks from stools last autumn, may be budded next summer or autumn. The stocks are furnished by Hooker & Co., of Rochester, and other nurserymen, at $15 per 1,000. The plum scions may be obtained of C. Reagles & Son of Schenectady.

Strawberry plants may be sent by mail with safety, if not over a week on the road, by wrapping the roots with a very little damp moss, (the expanded leaves being taken off,) in thin oil-cloth or "oil-silk," drawing it carefully around by means of a thread, from one end to the other, and leaving a small orifice at the crown end. Half a dozen small plants might be thus wraped together.]

DRAINING.—I thank your correspondent, GEO. ALDERSON of Albany, for the much useful instruction

contained in his letter about underdraining. I wish he had stated whether he used all sole tile, or part horse shoe tile. Also whether he leaves an air hole at the upper end of each drain, by filling up with small stones to the top of the ground. I should like to know whether that is absolutely necessary or not. E. M.

Blindness.—Is there any remedy for blindness in a young horse, occasioned by cataract? J. P.

Norton's Melon Apple.—Aaron Norton of Clifton Mills, Ky., is informed that scions of this apple may be procured of any of the Rochester nurserymen, (as for instance, H. E. Hooker & Co.,) by enclosing a few postage stamps.

Disease in Calves.—I have a neighbor who has a disorder among his calves which I do not understand. Their legs swell up to their ankles, and they lose the use of their legs. Their appetite remains good. Their legs are cold. After remaining so for a while, they die. I cut one of their tails; the blood started freely and looked good. If any of your subscribers could tell the name of the disease and the cure, they will do me a favor. D. P. *Jewett, N. Y.*

Barberry Seed.—You express a wish to have the Barberry plant tested for hedges. Last year I planted seeds enough for about twenty rods of hedge, and to my disappointment, not more than one out of twenty came up. I planted them about the first of May, an inch deep, and then sifted some rotten chip manure, and sprinkled it about half an inch thick over them. If you can tell me through your paper of any method that will insure the seed to vegetate, you will confer a favor, (as I have about a quart of the berries,) on your subscriber. Thomas Lawrence. *Olena, Ohio.* [The difficulty was undoubtedly their *dryness*—from keeping so long before planting. If the seeds are well ripened; washed from their pulp late in autumn or early winter; and then mixed with sand and planted or treated as apple seeds, cherry stones, &c., we have never found them difficult to start. If the above is not the reason of the failure, it must be from some cause of which we are not informed. It may be that the seed now on hand are already too dry; but they may be immediately mixed with moist sand, exposed till spring, and then tried.]

Eggs.—*G. W. W.* Eggs can be sent by express without injury. For those who have them for sale, see advertisements.

☞ J. T. P., Bristol, Tenn., is informed that the subscriber is the writer of the article on the Culture of the Onion in your last volume. John H. Vail. *Chester, Orange Co., N. Y.*

Pine Sawdust.—I have been in the practice of hauling into my barn-yard, whenever it gets too mirey, sawdust, principally pine and cedar, to make walks about through it; and I expected the sawdust would be good manure in the spring; but I was somewhat startled a few days ago in reading one of your papers, which says—"It is true the public have been cautioned against using *Pine* sawdust." Now is there anything hurtful in the article, and if so, what shall I do with all my manure that has it in? I have also kept my hog-pen dry with sawdust, and was thinking of making arrangements to save all the sawdust that we made with our up and down and circular saws. A New Subscriber. [Will some of our readers who live in pine regions, please give us the result of their experience? In the meantime we may add that Mr. Prentice of Mount Hope, has used hundreds of loads of pine sawdust and shavings for bedding his cattle and absorbing the liquid manure, without ever having discovered any injury from their use.]

How to Improve the Stream of Milk.—I notice on page 56, present vol. Co. Gent., P. McC. inquires how he can make his heifer give a larger stream of milk. I have had cows that milked hard and gave a small stream of milk, and have remedied it as follows: Grasp the teat tightly around before she has been milked, leaving the lower end as full of milk as it will hold without running out; take a small sharp penknife and run it into the orifice of the teat, say a quarter of an inch; then try and see if she milks any easier; if not, run the blade in say three-eighths or half an inch—your own judgment will tell you how much you should cut. As a general thing, the blood will not run. Should you have occasion to cut more than one side of the teat, you should turn the knife just half around and that will give you a flat stream. This may answer for your cow; at any rate, you can try it on one teat. W. *Alleghany Co., N. Y.*

Bi-sulphate of Lime.—You will oblige me by informing me how I can procure some bi-sulphate of lime, mentioned on the 405th page of the Patent Office Report of 1849, which I think would be of great benefit in making sugar from Sorghum. H. C. M.

Reapers.—Will some of your subscribers give me their experience with the various reapers now in use—the cheapest and best used, and whose patent is best adapted to an uneven or hilly surface—where to be procured, and at what price? J. H. G. *Bagdad, Tenn.*

Stump Machine.—Can you give me any information of a good stump machine where it can be had, and at what price? S. M. Foulks. *Henrysville, Ky.*

Jumping Ox.—I see an article in the Cultivator, Feb., 1858, p. 63, as regards jumping oxen, and what is the best preventive. I think I can answer the question in a few words satisfactorily. I have tried the plan this fall, and it worked well—that is, take the ox, put him in a good stable, and make him fast with a good rope. Feed him all the corn meal he can eat for three months, and carry him what water he wants three times a day. The first time you let him out of the stable, take him to the slaughter-house, and let the butcher have him for what he will fetch. By so doing you will get rid of the ox, and well paid for your trouble. C. S. G. *Brooklyn, O.*

Just say to R. N., Randolph, Vt., (in the Co. Gent., Vol. XI, No. 1,) to bleed in the leg. R. J. B.

## Culture of the Locust.

Messrs. Editors.—You can tell S. L. S., Guilford Center, Vt., to scald his locust seed in April, and plant in drills thick. Take up the following spring, and cut off the tap roots, and plant out in rows 4 or 5 feet apart and 1 foot in the row, and cultivate until large enough to set out. He will find on taking up his trees, three or five years afterwards, that they will have roots much like the apple tree taken from the nursery—all small and very numerous; just the reverse of what they would have been had they stood where the seed was planted. Cut all the limbs and part of the top off, when set for permanent growth. W. H. W.

AN AG. HIGH SCHOOL IN PENNSYLVANIA.—A correspondent at Pittsburgh calls our attention to the fact that an establishment of this kind is now in process of organization. The Trustees have purchased 200 acres adjoining a tract of similar extent donated for the purpose by Gen. JAMES IRVINE, in Center County,—the citizens of which have contributed $40,000, the State Agricultural Society $10,000, and the Legislature $45,000, for the erection of suitable buildings, laying out the grounds, and planting as extensively as practicable, preparatory to the commencement of a course of instruction. "A convenient farm house, a large barn, corn-cribs, wagon sheds, and other necessary out-buildings have been completed; an edifice two hundred and thirty-three feet in front, and five stories high, with wings at either end, built of limestone, is in a state of forwardness, and will be completed during the ensuing summer, at a cost of fifty-five thousand dollars. The building is adapted to the accommodation of at least two professors with their families, and three hundred students."

LETTERS OF INQUIRY.—No better evidence need be required of the interest awakened by the communications of plain observing practical men, detailing their practice, than is found in the number of letters addressed to them asking for farther and more minute information on the matters treated of. Our correspondent, Mr. JOHN JOHNSTON, in a late letter says—"I have no doubt but I have answered more than seven hundred letters in the last fourteen years, in relation to draining, feeding cattle, sheep, &c." And in sending us the following note, Mr. HOWATT states that he has received, within the past few weeks, about fifty letters of inquiry about matters on which he had written in the Country Gentleman, all of which, so far as he could, have been answered:

Those gentleman who have written to me, and have not received answers to their letters, on potatoes, cucumbers, &c., will please write again, and write their names and address distinctly, as some of them have neither State nor post-town. All inquiries will be immediately answered, when the proper address is given and a stamp enclosed to pre-pay answer. GEBALD HOWATT. *Newton, N. J.*

WINE MAKING NEAR HOME.—We learn that Mr GEO. L. RUNDLE of Greeneville, Greene Co., who has been for some years engaged in the cider business—clarifying it, and converting it into what is called "champagne cider," for the New-York market—the last season added to his establishment a new branch, that of wine-making, and that he pressed over twenty tons of elderberries and about five tons of grapes and currants, the juice of which was converted into elderberry, grape and currant wine. We presume this is the largest lot of elderberry wine ever made in this country.

PLAN OF A SMALL HOUSE.—A correspondent at Little Eagle, Ky., sends us a plan of a small house that has some good points, but also some serious defects—among which are, the wardrobe and bed-room are at the opposite ends of the building, and nearly the same remark applies to the pantry and kitchen. The chimneys being placed at the farthest extremities of the house, would not look well in a gothic elevation, which our correspondent desires us to furnish him.

CHINESE PIGS.—J. M. FOY, Esq., Scott's Hill, N. C. wishes to procure a pair of Chinese pigs. We do not know who has them for sale.

CHINESE SUGAR CANE SEED.—It will be seen by I. W. BRIGGS' Advertisement in this paper, that he proposes to distribute any quantity of this seed, from half an ounce to a pound, on receipt of P. O. stamps enough to prepay the postage; and he is the man to do what he promises.

THE "FRIENDS' REVIEW," Philadelphia, a periodical of high literary ability, gives lately a handsome notice of the Country Gentleman, and says, "As a weekly Agricultural Journal for the Farm, the Garden, and the Fireside, uncontaminated by tales, the Country Gentleman, so far as we know, has no competitor."

HORSE PITCH-FORK.—ROBERT HATTON of Waynesville, Ohio, says, "I made a pitch-fork from the description in the Register, p. 338, but found the tines too weak, as they broke immediately. Unless the smith was very well acquainted with working steel, I would say that three-fourths of an inch was none too large for them; and in common use they might be shorter than 20 inches—I would prefer 18."

☞ The United States Ag. Society at the late Washington meeting, resolved to bestow on Col. WILDER a service of plate to the value of $250, as a testimonial of appreciation of his services as President for the period of six years. Our columns during this time bear constant witness to the untiring energy, the unfailing attention, and the almost uniform success with which he has conducted its movements; and we may add, that to few gentlemen at the head of similar associations, are members of the Agricultural press, as a body, so much indebted for appreciative and appropriate courtesies. His kind and hearty greeting to the guests of the Society, and his thoughtfulness in meeting their wants, amidst all the confusion and bustle of a Show, have only seemed to grow surer and prompter, and for this reason if for no other, his presidency will live long and pleasantly in the memories of many friends of Agriculture in every state, whose delegates he has welcomed.

SALES OF DEVONS.—JOHN R. CHAPMAN of Oneida Lake, the last week purchased of Capt JOSEPH HILTON of New-Scotland, a yearling Devon bull, "Master Quartly," out of Ruth by Frank Quartly, both imported by L. G. Morris, Esq.—a heifer calf, "Flora," also out of Ruth, by Empire, who took the first prize at the late State Fair at Buffalo, and the yoke of Devon oxen upon which Capt. H. received the first prize at the Albany Co. Fair in 1856, and the first prize at the State Fair in Buffalo. They are all very superior animals.

AMERICAN FRUIT IN ENGLAND.—We are pleased to notice that Messrs. Hovey & Co., of Boston, have received a very satisfactory and pleasant acknowledgment of a contribution made by them to the last Fall Show of the London Horticultural Society—in the shape of a large silver medal taken for a collection of upwards of 60 varieties of Pears, and prizes for specimens of Baldwin and Rhode Island Greening Apples. After the display was concluded, 70 or 80 of the finest fruits remaining in good order were presented by the Hort. Society to Her Majesty. The medal is described as "a beautiful specimen of the work executed at the

Royal mint. It contains on one side a figure of Flora, surrounded with her attendant nymphs, and on the reverse the following inscription: "The Horticultural Society of London, to Messrs. Hovey & Co., for a collection of pears, Oct. 4, 1857," surrounded with a wreath of roses and grapes."

☞ At the annual meeting of the New-Jersey State Ag. Society, held at Trenton on the 20th Jan., a special Diploma was awarded to our correspondent, GERALD HOWATT, for the best acre of Prince Albert Potatoes, an account of which was published in the first no. of our present vol. Mr. H. also received the first prize for the best acre of Ruta Bagas, and the second on his crop of Potato Oats.

THE LLAMAS.—Mr. LOHMAN writes us that the recently imported Llamas are the kind that produce the Alpaca wool—that they are shorn twice a year, producing 16 to 20 lbs. at each shearing—that they breed every nine months, and attain the age of 18 years.

ROOT CUTTER.—Mr. CAMPBELL informs us that while at Red Hook, he saw Willard's root cutter, figured and described in our last vol., p. 333, in operation, and that it sliced two bushels in one and a quarter minutes, with one hand to feed the roots and another to turn the crank.

DRYING WOOD.—It has been found that the most thoroughly seasoned wood, at common temperatures, still contains about one-tenth water.

FRANKLIN COUNTY, VT.—This is one of the best Dairy counties in the United States. Its territory includes only 420 square miles, and yet it exported from the railroad station at St. Albans in the year 1857, 2,413,328 lbs. butter, and 878,050 lbs. cheese—amounting, estimating the butter at 20 cents, and the cheese at 10 cents per lb., to $570,450 60. The St. Albans Messenger, from which we learn the amount of shipments, says: "But for the low price paid for butter and cheese in the latter part of the season, a much larger amount of produce would have been sent off. Very many of our farmers have not sold the cheese made during the summer, nor the butter made in the fall. Some of them have tons of it stowed away, hoping to realize better prices."

EXPENSIVE FENCING.—The Mendota Press states that the Illinois Central Railroad have been setting a snow fence from Galena to La Salle. The portion of the road from Dunleith to the former point does not require that protection, owing to the nature of the surface. The fence has been set for seventy eight miles, on an average about ten boards high, and will cost when completed in the coming summer, about one hundred and thirty thousand dollars. The posts are of oak, very heavy, set three feet in the ground, and the boards are put on with regard to permanency. It is believed that the fence will stand for forty years.

GOOD RYE CROP.—Mr. A. STEVENS, Pittsfield, Mass., informs us that he raised the past season, 62 bushels rye on two acres.

HORSE EXHIBITIONS.—The County Ag. Societies of Cayuga and Onondaga, have resolved to separate their Horse Exhibitions from the regular County Fairs, and to have shows in June, when the horsemen can have it "all their own way."

COL JOHN L. WHITE of Pittsylvania C. H, Va., lately purchased in England, the celebrated race-horse "Fly-by-Night," (by Flying Dutchman,) which arrived at New-York Jan. 17th.

THE WINTER IN ENGLAND.—A correspondent of the Cottage Gardener speaks of having dined "on Christmas day with a friend whose house is situated close on the confines of Dartmoor, (Devonshire,) a bouquet consisting of the following flowers, all of which were gathered from the *open garden*, standing on the table: Fuchsias, fine; *Tom Thumbs*, Ageratum, Nasturtium, fine, Mignonette, Salvias, Periwinkle, Polyanthus, Verbenas, &c."

☞ The next Ohio State Fair is to be held at Sandusky.

BARBERRY FOR HEDGES.—We mentioned this shrub a few weeks since with the hope that a trial might be made with it for hedges. In a recent letter from E. ORDWAY, of Freeport, Illinois, he says: "We sowed the Barberry and Buckthorn seed for a hedge in the spring of 1847, and both will now turn stock. We think the Barberry superior to the Buckthorn for a hedge."

THE VALUE OF TURNIPS.—A subscriber in New-Hampshire writes us as follows:—"You may tell your correspondent, J. W. CLARKE, in Co. Gent., Dec. 17, that we do not think much of his article on the 'Economy of Feeding Roots.' I have raised from five to eight hundred bushels of turnips in a year with my corn, for years past, and I find that my stock looks as well in the spring as my neighbors', who raise no roots; I find them good also for hogs, and I think they do as well on turnips boiled as they do on potatoes."

HEREFORD CATTLE.—Extract of a letter from ALLEN AYRAULT, Esq., of Geneseo, dated Feb. 2—"I like the Herefords as well as ever. They mature earlier, cheaper and better than any other kind I have raised. Those I sent to market last fall, were a mixture. The Herefords were the best in quality, although in one or two instances perhaps not quite as valuable."

A PREMIUM FARM.—Those who have had the opportunity of witnessing the skill and neatness which mark all the operations, the buildings and fields of Mr R. J. SWAN, near Geneva, will be pleased to notice by the list published in another column, that the N. Y. State Ag. Society has just awarded him a Silver Cup for the *best farm* in the state. Mr. S. is the son of B. L. SWAN, Esq., a wealthy merchant of New-York, and his name might be added to the already considerable list of young men, whom the position now occupied by Agriculture as a pursuit, has attracted from city life to the labors and enjoyments of tilling the soil, and who have in this pursuit achieved a success rarely if ever surpased by those brought up to it from boyhood.

PROTECTION OF WESTERN NURSERY TREES.—O. M. COLMAN of Bloomington, Ill., says,—"The two past winters have been hard on western nurseries—still in both we did not lose 500 trees. We regard *hilling up* quite important for trees like ours." WM. LAER, nurseryman, of Iowa, remarks,—"In the winter of 1856–7, I had not banked up my one year old trees, so by heaving of the ground, over 12,000 fine grafted trees were root killed, the tops remaining sound and green."

NEW EVERGREENS IN MICHIGAN.—WM. ADAIR of Detroit, writes—"I have abandoned the cultivation of many evergreens that were *reputed* hardy, but which with me have proved disastrous failures, and among

them Deodar cedar, Lebanon do., Cryptomeria, Chili pine, English and Irish Yew, European Silver fir (A. pectinata taxifolia,) and Abies pinsappo.

☞ Those wanting pure-bred Short-Horn cattle, are referred to the advertisement of Dr. WENDELL. It will be seen that the pedigrees include strains of the best families of Short-Horns in England.

VALUE OF OUR PUBLICATIONS. — A subscriber at New-Castle, Pa., says—"Your publications have been of great service to me. About three years ago I purchased a small farm near the village in which I am engaged in business, for the purpose of making a more comfortable home for my family, away from the soot and coal smoke of our iron manufactories. By the aid of the Rural Register and Co. Gent., I have been enabled to erect my buildings, lay out and ornament my grounds, select my fruit trees, shrubbery, &c., entirely to my satisfaction. I built my pig-house on the plan given in the Register, and find it to answer admirably."

COTSWOLD SHEEP.—R. G. COFFIN of Dutchess Co., gives his preference to the Cotswold over any other breed, when looked upon as a wool-producing and mutton sheep. He sold in December last, five wethers of this breed, 21 months old, at $14 each. The expense of rearing them to that age, including pasturage, hay, turnips and grain, was $42.13. They produced 40 lbs. wool, at 31½ cts., amounting to $12.60, making the whole income from them $82 60, and leaving a clear profit of a fraction over $8 each.

*Correction.*—In the December No. of "The Cultivator," 1857, p. 367, in my "*Report of Experiments with Potatoes*," in Axiom 12th, "to *renew* and *improve*," should read, to *get new and improved varieties of* "the seed," &c.; as it seems that Prof. S. W. Johnson took me to mean *regenerate*, and very naturally but erroneously; which *idea* I had not the most distant thought of conveying. J. C. CLEVELAND.

MOWING MACHINES.—Doubtless there are many who, like L. R., are anxious to know what mower took the premium at Syracuse. But why do not farmers judge these machines for themselves, as they do of plows, &c. When we are about to buy a plow, we pay but little attention to prizes, but buy the one that does *our work best*. There are several machines that have taken first prizes, that are hard for every day work. It is my opinion that R. L. Allen's machine works the easiest, and will do good work under a greater variety of circumstances than any other. P. P. PECKHAM. *Columbia Cross Roads.*

GOOD RYE CROP.—I noticed in the Co. Gent. a good rye crop, raised by Mr. A. Stevens of Massachusetts, which induces me to tell what I have done. I raised the past season 103¾ bushels on three acres. This being my first experience, I think it pretty good. A. J. HULL.

THE UNION AG. SOCIETY, at Palmyra, held their annual meeting Feb. 3, 1858. Luther Sanford of Palmyra, was elected President; Ornon Archer, Cor. Secretary, Palmyra; C. J. Ferrin, Rec. Sec'y, Palmyra.

STEUBEN CO. AG. SOCIETY.—The officers elected at the annual meeting, held at Bath, January 13th, 1858, are as follows:

President—LYMAN BALCOM.
Vice Presidents—Daniel Gray, T. M. Younglove, Chas. Cass, John W. Whitney, Wm. Healey, and Harvey Bissell.
Treasurer—Reuben Robie.
Secretary—Robt. M. Lyon.

### New-York State Ag. College.

Meetings of the Trustees of this institution were held in this city the 9th, 10th, and 11th insts., at which the following members of the Board were present:—Gov. KING chairman, Messrs. Wm. Kelly, Abraham H. Post, Henry Wager, Arad Joy, Samuel Cheever, M. R. Patrick, E. P. Prentice, Alex. Thompson, and B. P. Johnson. James O. Sheldon of Geneva, was elected Trustee in the place of Rev. Amos Brown resigned, and took his seat with the Board. Arad Joy of Ovid, was elected Treasurer instead of Joel W. Bacon resigned. B. P. Johnson was elected Secretary in place of Rev. Amos Brown. Hon. Geo. W. Patterson resigned as Trustee, in consequence of ill health preventing his attendance, and Hon. Benjamin N. Huntington of Rome, Oneida Co., was elected to fill this vacancy, and we understand has since signified his acceptance.

Gov. King informed the Board that since the last meeting he had received from the Comptroller $8,000, of the loan made by the State, and the same had been deposited in bank to the credit of the President of the College. Samuel Cheever, Alexander Thompson, and Henry Wager were appointed a building committee.

Alex. Thompson was appointed a member on course of studies in place of Amos Brown.

The committee on course of instruction made a partial report, and the whole subject was then recommitted to the committee.

The building committee was instructed to employ competent persons to examine the stone quarried on the premises of the College.

The plan for the buildings, as heretofore mentioned in our columns, is that submitted by Mr. HEWES, architect, of this city, and consists of a main building 51 feet front by 132 deep, having on each side a wing 86 feet deep, by 60 in length, and at the extremity of these wings, transverse wings, each having a front of 60 feet, and a depth of 128—the whole calculated to accommodate 400 or 500 students. In view, however, of the present financial condition of the country, and aiming to keep within the limit of their present means, the Board directed the Building Committee to proceed to contract for the materials for the center building and south sub-building* only, and in pursuance of this decision the building committee proceeded to close a contract for all the lumber necessary for the buildings to be erected.

We are pleased to notice that the proceedings of the Trustees evince great care not to proceed with the erections for the Ag. College, farther than their funds will warrant. They expect to have the erections above designated enclosed and roofed during the coming season; and early in the ensuing year it is hoped to be in readiness for 100 pupils.

There can be no doubt, we think, that they will accomplish this, and thus be enabled to present to the farmers and mechanics of the state an opportunity to test the value of the instruction, theoretical and practical, which will there be given. The gentlemen who have its management in charge, are excellently qualified for their responsible position, and the recent ad-

* We are informed by Mr. HEWES that this portion of the buildings, comprising the center and one lateral wing, will contain janitor's rooms, laundry, laboratory, kitchen, store rooms, dining room, President's room, Professors and Teachers' rooms, class and recitation rooms, halls, stair cases, lecture room, and seventy study rooms, with bed rooms attached, each for two students.

ditions to the board, no less than its former members, deservedly possess the entire confidence of the community. The determination with which they have engaged in the work was well illustrated by the remark of their President, at the meeting Thursday night—that they would "put a roof wherever they laid a foundation;" in other words, that they would not be tempted into expenditures of any kind beyond their means, and that they would make no beginning where they could not clearly see the accomplishment of the end before them.

## Agricultural Societies.

KENTUCKY STATE AG. SOCIETY.—This society held its annual meeting Jan. 9, the President, Col. Brutus J. Clay of Bourbon, calling the convention to order. After the transaction of some unimportant business, an election for officers for the ensuing year was gone into, which resulted as follows:

President—BRUTUS J. CLAY of Bourbon.
Vice Presidents—A. J. Alexander, J. A. Tomlinson, R. Rawler.
Directors—Gibson Mallory, J. S. Jackson, G. M. Priest, J. M. Sharp, Lucius Desha, H. Thompson, J. S. Bradford, C. B. Cook, and E. L. Drane.

The following is an abstract of the Treasurer's report:

| | |
|---|---|
| Total receipts during the year 1857 from all sources, | $8,475 75 |
| Expenses same period, | 6,391 95 |
| Leaving a balance of, | $2,083 80 |
| Silver premiums on hand, | 405 00 |
| Balance on hand at close of second year, | $2,488 80 |

Mr. R. W. Scott was elected Corresponding Secretary, and Mr. James W. Tate Treasurer. Mr. Scott declined the office of Secretary. The Society then postponed the election of Secretary until their next meeting, which is to take place at Frankfort on the 12th of February, when the place for holding the next State Fair will be selected.

BUCKS COUNTY AG. SOCIETY AND MECHANICS' INSTITUTE.—An adjourned meeting of this Society was held at the Newtown Hall, on Thursday, the 21st Jan., the President, WM. STAVELY, Esq., in the chair. The minutes of a former meeting were read and approved. The Committee on Rules and By-Laws made a report, which being read, considered and somewhat amended, were adopted. This completes the organization of the Society under the late Charter.

An election for officers was then held, which resulted in the unanimous choice of the following gentlemen:—

President—WILLIAM STAVELY.
Vice President—Robert Longshore.
Recording Secretary—John S. Brown.
Corresponding Secretary—Edmund G. Harrison.
Treasurer—Jacob Eastburn.
Managers—Lewis Buckman, Adrian Cornell, Jno. Blackson, Hecter C. Jarvis, Edward H. Worstall, Charles W. Biles, Captain Joseph Eyre, J. Paul Knight, John Robbins, John Bamsley, Silas Carey, J. Watson Case, Moses Eastburn, Jonathan Knight, Alfred Blaker.

The last Wednesday of September of each year, at the Society's grounds at Newtown, were fixed upon as the time and place of holding exhibitions of the Society, until otherwise ordered.

We have received the new By-Laws of this Society, and deem them the best adapted for the purpose of any which have fallen under our notice.

THE BAINBRIDGE AG. SOCIETY held its annual meeting for the election of officers for the ensuing year, on the 17th day of January, 1858. The following officers were elected:—

President—D. A. CARPENTER.
Vice Presidents—Charles Bixby and Ira Bennett.
Sec'y and Treasurer—Mulin Jackson.
Directors—Noble Buck, Philip Northrup, L. C. Pollard Ira Hyde, Pliny Kirby and John Banks.

RENSSELAER CO. AG. SOCIETY.—The next Annual Fair will be held on the 14th, 15th and 16th of September. The following are officers for the ensuing year:

President—JOHN H. WILLARD, Troy.
Vice Presidents—Henry Warren, Geo. Vail, Hugh Rankin, Benj. Starbuck, Troy; H. W. Knickerbocker, Lansingburgh.
Treasurer—A. Van Tuyl. Secretary—William Hagen.

GREENE CO. AG. SOCIETY.—Officers for 1858:

President—LEWIS SHERRILL.
Vice-President—Cyrus Field.
Treasurer—Addison P. Jones.
Secretary—Horatio L. Day.
Directors—Edward Johnson and Luke Roe, for 3 years.

## Farm Accounts and Statistics.

We can only *generalize* from *particulars*, and upon the truth of the items, statistical and descriptive, depends the value of all deductions and inferences. This is particularly applicable to agricultural generalizations. They are too often made up from guesses—from random estimates—and mislead those who rely upon them for practical information.

What a mass of valuable *particulars* might be readily obtained, did farmers generally keep an account with their crops—of cost and product—of soil, culture and circumstance. Few, very few, know how much (with any exactness) a crop of wheat or corn has cost them, or the expense attached to rearing animals for use and sale. A large class cannot even tell what their cash receipts and expenses are for a year, save as they remember the different items; yet they carry on a large business.

In that business, how can they proceed understandingly? How can they tell what branch of farming is most profitable? How do they know but they are losing money by that to which they give the greatest prominence, and making good profits upon that which they consider of very little importance? A correct account of capital, expenses, and receipts with each branch of farm products, would settle all these questions.

Any farmer who wishes to determine his stand-point for the future, should now commence with an inventory of lands, stock, grain, implements, &c. With the opening of the spring work, a journal of its labors should be kept, and these, posted weekly to the different classes of crops, &c. to which they belong, will show him at the end of the year what each crop has cost. A little care in measuring, weighing, &c., will show its approximate value, and then he has in black and white the result of his season's work. There he would find the material for many hours of thoughtful cogitation while maturing plans for the future, and thence he could draw stores of facts and particulars, useful to his brother farmers, to be disseminated by the public press.

Another thought. Who would think of carrying on any sort of a manufactory without a book-keeper and carefully kept accounts? No one, surely. But the farm is as much a manufactory as any which can be named, and its operations cannot be conducted skillfully and intelligently unless the same system is pursued.

## PLATTSBURGH NURSERIES.

A LARGE add excellent stock of HARDY NORTHERN FRUIT and ORNAMENTAL TREES, Vines, Shrubs, Hedge Plants, &c., &c.

APPLE TREES—Standard and Dwarf.

PEAR TREES—Standard and Dwarf.

PLUMS, Cherries, Currants, Raspberries, Gooseberries—all of the best varieties.

Also the following new choice GRAPES, superior to all cthers for open culture, ripening early, viz: Delaware, Diana, Rebecca, Marion, and Concord—all thrifty vines and at the lowest rates; also the old Standard sorts.

A new priced Catalogue will be issued in a few days, and will be sent to all persons applying.

Also YELLOW LOCUST SEED of the last season's growth, will be forwarded on orders, by Express, without charge for packing, at seventy-five cents per pound.

JOHN W. BAILEY, Proprietor,
Feb. 25—w2tm1t* Plattsburgh, N. Y.

## TO FRUIT-GROWERS—SPRING OF 1858.

IN ADDITION to our general stock of Fruit Trees, we solicit the attention of Planters to the following articles in particular, the stock of which is extensive, and of the finest descriptions:

PEARS ON QUINCE—Dwarfs and Pyramids, 2 to 3 years' growth; Trees of bearing size can be supplied of a few sorts.

CHERRIES ON MAHALEB—Dwarfs and Pyramids, very strong and well formed, all the best sorts in cultivation.

FOREIGN GRAPES for Vineries—strong, 2-year-old plants, in pots from eyes—all the popular varieties.

STRAWBERRIES—upwards of 40 varieties, including McAvoy's Superior, Longworth's Prolific, Hooker's Seedling, Genesee, Jenny Lind, Scott's Seedling, &c.; also, the finest French and English varieties, including Trollope's Victoria, and Triomphe de Gand, two superb, hardy, and prolific varieties.

RASPBERRIES—Brinklé's Orange, the hardiest and best light colored variety known; also, Merveille de 4 Saisons, and Belle de Fontenay, the two best autumnal sorts, superb large fruits and prolific.

All these fruits have been propagated and grown, with the most scrupulous regard for accuracy, and may be relied upon. Early orders are solicited.

ELLWANGER & BARRY,
Mount Hope Nurseries,
Feb. 18—w2tm1t Rochester, N. Y.

## Devon Prize Bull for Sale.

THE subscribers offer for sale their Prize Bull "New Britain 2d." He received the first prize as a yearling, at the late Fair of the Conn. State Agricultural Society. He will be two years old next March; is of good size, and is a very perfect animal.

We also would sell "Charter Oak;" he is own brother to New Britain 2d, and will be one year old next March.

WELLS BROTHERS,
March 1—m3t New-Britain, Conn.

## POUDRETTE.

OUR prices for the above valuable fertilizer, viz:—For one barrel, $2—two barrels, $3.50—three barrels, $5—four barrels, $6.50—five barrels, $8—six barrels, $9.50—for seven barrels and over, at the rate of $1.50 per barrel, delivered free of cartage. Send your orders early to

GRIFFING BROTHER & CO.,
Feb. 25—w8tm3t 60 Cortlandt-st., New-York.

## Agricultural Implements.

A CONSIGNMENT of Agricultural Implements from an extensive manufactory, is now offered for sale at prices 20 per cent below the private rates of the Agricultural Warehouses, consisting of Plows, Corn Shellers, Fanning Mills, Straw and Hay Cutters, Vegetable Cutters, Corn Mills, Churns, Cultivators, Horse Hoes, Road Scoops, Garden Barrows, &c., &c. A Pamphlet giving description and prices, will be sent free, on applying to the Agent,

A. LONGETT,
March 1—m2t 34 Cliff Street, New-York.

## A FARMER WANTED.

A MIDDLE-AGED MAN and his Wife, to take the charge of a Farm in the vicinity of New-York, devoted to the usual variety of farm products. They must be Americans, of good moral character, industrious, and well acquainted with their business. None others need apply.

Address "FARMER," Box 2137, New-York Post Office.
Feb. 11—w2tm1t

## Ornamental Trees and Plants
### For Spring of 1858.
### EVERGREEN, DECIDUOUS, WEEPING, &c.

ELLWANGER & BARRY, Rochester, N. Y., beg to inform Nurserymen, Landscape Gardners, and Planters generally, that their Stock of the following articles is large, and will be sold at prices to suit the times.

1ST—EVERGREENS.

NORWAY SPRUCE, of various sizes from one to six feet high, well formed specimens, in quantities from one dozen to 100,000.

PINES, Austrian, Scotch, and White or Weymouth, from 8 to 12 inches—frequently transplanted.

ARBOR VITÆ, Siberian, 2 to 3 feet; this is a beautiful hardy tree.

ARBOR VITÆ, American, 1½ to 4 ft., for hedges, screens, &c.

PINSAPO SPRUCE, 12 to 18 inches high, quite broad and stout—a fine rare tree.

AFRICAN OR SILVER CEDAR, 2 to three feet high. This is a noble tree, resembling the Cedar of Lebanon, but hardier and of more rapid growth.

JAPAN CEDAR, (Cryptomeria Japonica,) 3 to 4 feet high, in pots, not quite hardy at Rochester.

CHILI PINE, (Auracaria Imbricata,) 12 to 18 inches, stout and bushy, (in pots,) not quite hardy at Rochester.

Besides these we can furnish a great number of others, for which we refer to Descriptive Catalogue No. 2.

☞ See also advertisement of California Evergreens.

2D—DECIDUOUS TREES.

Scotch Elm, 8 to 10 feet; Huntingdon Elm, 8 to 10 feet; Tulip tree, 8 feet; Magnolia acuminata, 4 to 5 feet; Purple-leaved Maple, 4 to 5 feet; Gold-striped leaved do., 4 to 5 feet; Snowy Mespilus; Profuse flowering do., grafted, 4 to 5 feet high—a fine small lawn tree; Rosemary-leaved Willow, 5 feet, grafted—a beautiful feathery tree.

3D—WEEPING OR DROOPING TREES.

We have the pleasure of offering a fine stock of the following graceful trees so desirable for lawns, cemeteries, &c.: Weeping European Ash, Weeping Lentiscus-leaved Ash, Weeping Mountain Ash, Weeping Poplar, Weeping Linden, Weeping European Birch, Weeping American Willow, Weeping Kilmarnock Willow, Weeping Cherry, (ever blooming,) Weeping Heart Cherry.

The above will be supplied in quantities to suit purchasers. Priced Catalogues sent gratis to those who enclose one stamp. ELLWANGER & BARRY,
Mount Hope Nurseries,
Feb. 18—w2tm1t Rochester, N. Y.

## PERUVIAN GUANO,

DIRECT from the Peruvian Agency Store Houses, Government brand and weight, in quantities to suit purchasers. Send for a Circular giving prices of fertilizers, and it will be sent free. A. LONGETT,
March 1—m1t 34 Cliff Street, New-York.

## FINE HARDY BORDER PLANTS.

PHLOXES—160 of the most beautiful varieties.

CHRYSANTHEMUMS—70 of the finest pompone varieties and 25 of the large. We give special attention to these—importing annually the best new varieties from abroad.

HOLLYHOCKS—superb double varieties, of all colors, perfect as Dahlias.

DIELYTRA SPECTABILIS.—This plant proves to be as hardy as a common Pæony, and is one of the most remarkable and beautiful of all border plants. Over 10,000 strong plants for sale.

Besides the above, we can supply over 200 other choice perennial border plants, selected with great care and discrimination. ELLWANGER & BARRY,
Mount Hope Nurseries,
Feb. 18—w2tm1t Rochester, N. Y.

## To Amateurs and Gardeners.

RARE SEEDS.—I can furnish early applicants a limited quantity of the following: Sagg's Royal Exhibition, Kenyon's Free Bearer, Improved Iron Horse, Walker's Prize Fighter, Wood's E. Frame, and Cuthil's Black Spine Cucumbers at 25 cents per packet—Dan'l O'Rourke Peas (true) 37½ cents per quart—Hair's Df. Black Mammoth, 44 cts. per quart—Eugenie and Napoleon, each 12½ cents per pkt.—Wyatt's Red Beet, Atkin's Matchless Cabbage, Wait's Alma Cauliflower, Wait's King of the Cottage, and Large London Savoy, each at 12½ cents per pkt.

☞ Descriptive Catalogues of the choicest collection of American, English, French and German FLOWER SEEDS, ever offered in this country, to applicants enclosing a three-cent stamp. 20 papers of Flower Seeds for $1.

Address, G. F. NEEDHAM,
Feb. 11—w2tm1t Florist & Seedsman, Buffalo, N. Y.

### Drain Tile Machines for Sale.

THE long-needed article is at last offered for sale cheap. I am prepared to furnish Drain Tile Machines, complete and ready for use, for $150. Two men can make 3,000 two-inch tile in ten hours. All Machines warranted.

Address GEO. ALDERSON,
Feb. 25—w4tm1t* Albany, N. Y.

### SUPERPHOSPHATE OF LIME,
### BONE DUST,
### *COLUMBIAN GUANO,*

FOR SALE by A. LONGETT,
March 1—m3t 34 Cliff Street, New-York.

### Roses and Dahlias.

HYBRID PERPETUAL ROSES,
Moss Roses,
Hybrid China Roses.

And other classes, a large stock of strong plants.

Dahlias—a superb collection, embracing the finest new English and French varieties. The stock of the above is large, and will be sold at very low rates.

Descriptive Priced Catalogues forwarded gratis to all who enclose one stamp.

ELLWANGER & BARRY,
Mount Hope Nurseries,
Feb. 18—w2tm1t Rochester, N. Y.

### RARE EVERGREEN TREES
**Of California, &c.**

WE HAVE the pleasure of offering a moderate stock of the following rare and desirable trees of California, Oregon, &c. All are Seedlings, grown in pots, and in perfect health and vigor. Can be forwarded any distance with the balls unbroken.

Washingtonia, (Sequoia, Wellingtonia, &c.) The famous "big tree" of California—strong bushy plants from 8 to 12 inches—this proves hardy here.

Cupressus Lawsoniana, 8 to 10 inches, one of the most elegant of this genus yet discovered.

Libocedrus Decurrens, of Torrey, (Thuya gigantea,) six inches.

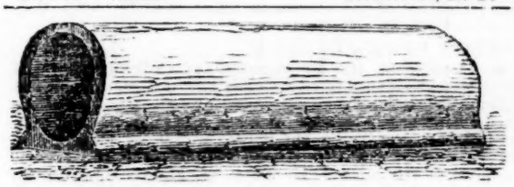
Thuya Macrocarpa, 8 to 15 inches.
" Articulata, 10 to 12 "

Abies Grandis, 1 year Seedlings, well ripened, and will bear carriage.

Pinus Benthamiana, 2 year Seedlings,
" Lambertiana, 2 " "
" Tuberculata, 2 " "
" Jeffreyi, 2 " "
" Monticola, 2 " "
" Sabiniana, 2 " " 6 to 8 inches.

For complete priced lists, we refer to our Catalogue No. 2, which will be sent gratis to all who apply and enclose one stamp.

ELLWANGER & BARRY,
Mount Hope Nurseries,
Feb. 18—w2tm1t Rochester, N. Y.



### ALBANY TILE WORKS,
*Corner of Clinton Avenue & Knox St, Albany, N. Y.*

THE subscribers, being the most extensive manufacturers of Draining Tile in the United States, have on hand, in large or small quantities for Land Draining, the following descriptions, warranted superior to any made in this country, hard burned, and over one foot in length. On orders for 5,000 or more, a discount will be made.

| HORSE-SHOE TILE—PIECES. | | | SOLE TILE—PIECES. | | |
|---|---|---|---|---|---|
| 2½ inches rise, | $12 per 1000. | | 2 inches rise, | $12 per 1000. | |
| 3½ " " | 15 | " | 3 " " | 18 | " |
| 4½ " " | 18 | " | 4 " " | 40 | " |
| 5½ " " | 40 | " | 5 " " | 60 | " |
| 6½ " " | 60 | " | 6 " " | 80 | " |
| 7½ " " | 75 | " | 8 " " | 125 | " |

Orders respectfully solicited. Cartage free.

C. & W. M'CAMMON,
Albany, N. Y.
RICHD. H. PEASE, Agent,
Excelsior Ag. Works, Warehouse and Seed Store,
Mar. 1—w&m8in. 84 State-st., Albany, N. Y.

### North Devons for Sale.

WATER LILY, calved spring 1853—Sire Albert (2)—Heifer calf by her side—Sire Trojan by Comet (162.)

VENUS, (1104)—calved fall 1849—Sire Champion—In calf by Hiawatha by Comet, (162.)

EUGENIA—Calved December, 1857—Dam Waterlilly—Sire Comet.

VICTORINE—Calved spring 1857—Dam Venus (1104)—Sire Toledo.

Bull TROJAN—Calved spring, 1856—Dam Rosa Lee—Sire Comet.

Bull CAYUGA—Calved fall 1856—Dam "Queechy," G. Dam Venus (1104)—Sire Rover (353.)

The above seven head will be sold TOGETHER very low for cash, or half cash, half approved endorsed paper.

The pedigrees have been entered for forthcoming vol. of Devon Herd Book. Address A. M. TREDWELL,
Feb. 25—w2tm1t. 251 Pearl St., New-York.

### To Farmers and Gardeners.

THE SUBSCRIBERS offer for sale 60,000 barrels of their

**New and Improved Poudrette,**

Manufactured from the night-soil of New-York city, in lots to suit purchasers. This article (greatly improved within the last three years) has been in the market for 19 years, and still defies competition, as a manure for Corn and Garden Vegetables, being CHEAPER, more powerful than any other, and at the same time free from disagreeable odor. Two barrels ($3 worth,) will manure an acre of corn in the hill, will save two thirds in labor, will cause it to come up quicker, to grow faster, ripen earlier, and will bring a larger crop on poor ground than any other fertilizer, and is also a preventive of the cut-worm; also it does not injure the seed to be put in contact with it.

The L. M. Co. point to their long-standing reputation, and the large capital ($100,000) invested in their business, as a guarantee that the article they make shall always be of such quality as to command a ready sale.

Price, delivered in the city free of charge and other expense—

| | |
|---|---|
| One barrel, | $2 00 |
| Two barrels, | 3.50 |
| Five barrels, | 8.00 |
| Six barrels, | 9.50 |

And at the rate of $1.50 per barrel for any quantity over six barrels.

☞ A Pamphlet containing every information, will be sent (FREE) to any one applying for the same. Our address is THE LODI MANUFACTURING CO.,
Feb. 25—weow6tm3t Office, 60 Cortlandt-st., New-York.

### Sugar is Made!

OLCOTT'S BOOK "SORGHO & IMPHEE," or the Chinese and African Sugar Canes: Containing full instructions for making SUGAR, MOLASSES, ALCOHOL, etc., etc.. Sent by mail, post-paid. Price $1.

IMPHEE SEED. One variety enough to plant 2 square rods sent by mail pre-paid with the book, for 6 cents more in postage stamps. Each additional variety of Imphee six cents. Only sent to those who order the book.

TEN VARIETIES. Gov. J. H. Hammond, of South Carolina, who raised the above seed, testifies under date of Nov. 26, 1857, that he does not recollect any variety of the Imphee which is inferior to the Sorgho, while many varieties have a larger stalk, yielded more juice, and marked a higher degree on the sacharometer, and in a letter to the undersigned, of Jan. 13, 1858, Gov. Hammond says: "I think these seed well worth distributing. They produce a sugar cane at least equal to the Sorgho in all respects, and some of them are twice the size. I am inclined to think we shall ultimately find several of the varieties, (ripening at different periods) superceding the Sorgho altogether. I plant this year 60 acres of the cane—of these four will be planted in Sorgho and the remainder in Imphee."

BETTER THAN SORGHO.

A supplement to "The Sorgho and Imphee," containing the American experiments of 1857, with J. S. Lovering's statement of his successful manufacture of brown and white sugar from the Sorgho, will accompany the book.

Address A. O. MOORE,
Ag. Book Publisher,
Jan. 21—weow4tm2t 140 Fulton-street, New-York.

### FRUIT BOOKS,

BY THOMAS. BARRY, DOWNING, and others, for sale at the office of the Country Gent. and Cultivator

## Pear Seedlings.

FINE healthy Pear Seedlings, one year, $8 per 1,000—$75 per 10,000.

Ditto, two years, $15 per 1,000—$140 per $10,000.

Norway Spruce, Scotch Larch and Fir, Apple, Mazzard, Plum, Angers Quince, Mahaleb, Paradise and Doucain stocks of the best quality. Catalogues to any address. Carriage paid to Boston or New-York.

New-England Pear Seed, $5 per quart.

B. M WATSON,
Old Colony Nurseries, Plymouth, Mass.

Jan. 28—w&m3m

## CRANBERRY PLANTS.

THE BELL variety is best adapted for general cultivation. Circulars will be forwarded to applicants.

NEW-ROCHELLE BLACKBERRY—Genuine plants at $2 per Dozen—$10 per 100.

HOP TREE—For ornament and use; it is superior to the common Hop.

RASPBERRIES—Brinckle's Orange, $1.25 per Dozen; Bagley's Everbearing, $1 per Dozen; New Red Antwerp and other choice varieties, 60 cents per Dozen—$4 per 100.

GRAPES—Isabella and Catawba, one year rooted, $10—two years, $18 per 100.

With a full assortment of Fruit, Ornamental and Evergreen Trees, Shrubs, Vines, Roses, &c.

For full particulars see Catalogue, which will be forwarded to applicants. F. TROWBRIDGE,
Jan. 14—w4tm2t New-Haven, Conn.

## Short-Horns for Sale.

THE subscriber has for sale at his farm, about four miles south of Albany, the following valuable animals:—

### BULLS.

LORD DUCIE (13181)—Roan—bred in England by Mr. R. Bell, nephew of the late Thos. Bates—imported by me in 1853—calved May 5th, 1852—got by Mr. Bates' Duke bull, 5th Duke of York (10168), who is full brother to 4th Duke of York, sire of Mr. Thorne's 2d Grand Duke. Dam, Briar, by the famous 2d Duke of Oxford (9046), who is also gr. sire on the dam's side, of the Duke of Gloster—gr. dam Beauty by 2d Cleveland Lad (3408), who was the sire of the celebrated Grand Duke (10284)—g. g. d. by 2d Earl of Darlington (1945)—g. g. g. d. by the Duke of Cleveland (1957), &c., &c. See E. H. B., (13181), vol. x.

Lord Ducie is in fine order, and having in his service been confined exclusively to my limited herd, is as valuable and will continue to be as serviceable as if he were a three-year-old. I am only induced to part with him because I have breeding females of his get, and a recently imported bull, Duke of Portland, to succeed him. I reserve to myself the use of him to three of my cows the coming season. Price $600.

DUKE OF LANCASHIRE—Roan, calved July 27th, 1857—got by imported Bates bull, Lord Ducie (13181), out of imported Lady Liverpool by Mr. Bates' 3d Duke of York (10166)——Lilly by the famous 2d Duke of Oxford (9066)——Harmless by Cleveland Lad (3407)——Hawkeye by Red Rose Bull (2493)——Hart.by Rex (1375);——owned by Mr. Bates, and selected by him from the celebrated milking tribe of Short-Horns owned by Mr. Richardson of Hart Durham. Price $300.

NORFOLK—Red and white, calved May 17th, 1857—got by imported Lord Ducie (13181)—out of Duchess of Exeter by imported Princes bull, Duke of Exeter (10152)——Isabella by Monterey, 720 A. H. B.——Lady by May Duke, 102 A. H. B.—&c., &c. See Am. Herd Book, vol. 2. Price $200.

### HEIFERS.

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